



NEWS

Denver Botanic Gardens

January 1989

Number 89-1



Victorian Gardens Exhibition Opens January 28

Saturday, January 28, is the long-awaited opening in John C. Mitchell II Hall of "Victorian Gardens: A Horticultural Extravaganza."

This traveling exhibit by the Smithsonian Institution in Washington, D.C., will illuminate the amazing transformation, under the reign of Queen Victoria of England, of not only horticulture and garden design but domestic life of the middle class throughout the Western world.

As presented in Denver it will be much more than an exhibit. Around the panels of historical prints and their informative texts the education department has woven activities and supplemental educational displays to further reveal the charm and importance of the era from 1835 through the early years of this century.

Valuable furniture and domestic objects have been borrowed from the extensive collections of the Colorado Historical Society. They will be arranged in the exhibit hall to illustrate the interior style of the age and to reinforce the educational messages on the display panels.

Plants from the Gardens' greenhouse collections, including many grown especially for the exhibit, will be displayed in a Lobby Court springtime Victorian interpretation by the plant collections department.

Two Sunday showings of the quintessentially Victorian movie *The Secret Garden* have been scheduled during the exhibit. This 1949 film about a young girl who transforms a run-down garden and the lives of everyone around her will surely stir your memories. If you're too young to have seen it the first time around, you'll still find it rewarding. The dates are Sunday, February 5, and Saturday, February 11. Admission fee is \$3 for adults and \$1.50 for children from six through 15. To register and receive tickets through the mail complete the registration form in this newsletter. (Consult the announcement of this film in another part of this newsletter.)

"Victorian Gardens" will be at the Gardens through Wednesday, February 15. However, to ensure your place in the activities planned please respond now. For additional information call 331-4000, extension 20.

You can further enter the mood of the Victorian era by enrolling in one or more of the several classes being offered during the run of the exhibit. Because floral arts were central to the new sensibilities under Queen Victoria, two classes will emphasize this gentle pastime. Popular instruction continued on page 3

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Summer Interns Receive Practical Experience at DBG

College is a time of excitement and a time to build expectations, but the most eye-opening experience can be graduating from college with wonderful grades expecting to get an incredible job—and not getting one.

This can frequently be avoided by working part-time for a company that is in your area of study. But many students find this difficult. Another way is to locate summer internships in your field.

Denver Botanic Gardens offers summer internships in applied horticulture. This program was developed to provide practical, hands-on experience for college students while still in school. It can help an undecided student determine how to plan the last year of his undergraduate studies. It can benefit a student by offering practical experience that will improve their professional resumes. It can give a student a realistic feel for what to expect after graduation. This program provides experience not normally obtained in the classroom environment.

The 1989 Summer Internship in applied horticulture begins mid-June and ends 10 weeks later in mid-August. If you, or anyone you know is interested in learning more about

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ANNOUNCEMENT

Annual Meeting and Dinner

John C. Mitchell II Hall

February 22, 1989

Cocktails served at 6:00 p.m.

Dinner served at 6:45 p.m.
followed by a brief meeting.

**Guest speakers are
Carolyn and Don Etter
Manager, Denver Parks
and Recreation**

Their topic will be:

**“Denver Parks and
People—Bridging the
Turn of the Century”**

Invitation will be printed
in the February *Green Thumb News*.

*Volunteer Pat
Hoffman enjoys
leading school
groups.*



Tributes

In memory of Wilda Mae Davis

Laura Gorman
Virginia McGrane
Carol Owens

In memory of Gladys Gettman Finch

Caroline L. Kreiger

In memory of Winnifred Markley

Dr. & Mrs. William Hiatt

**In memory of Mrs. Walter (Lissie)
Moyer**

Mr. & Mrs. Andrew Pfeiffenberger

In memory of Marguerite Ross

Barbara & Chuck Christensen

In memory of Elizabeth Timpte

Mrs. John M. Young

**Green Thumb News
Number 89-1 January 1989**

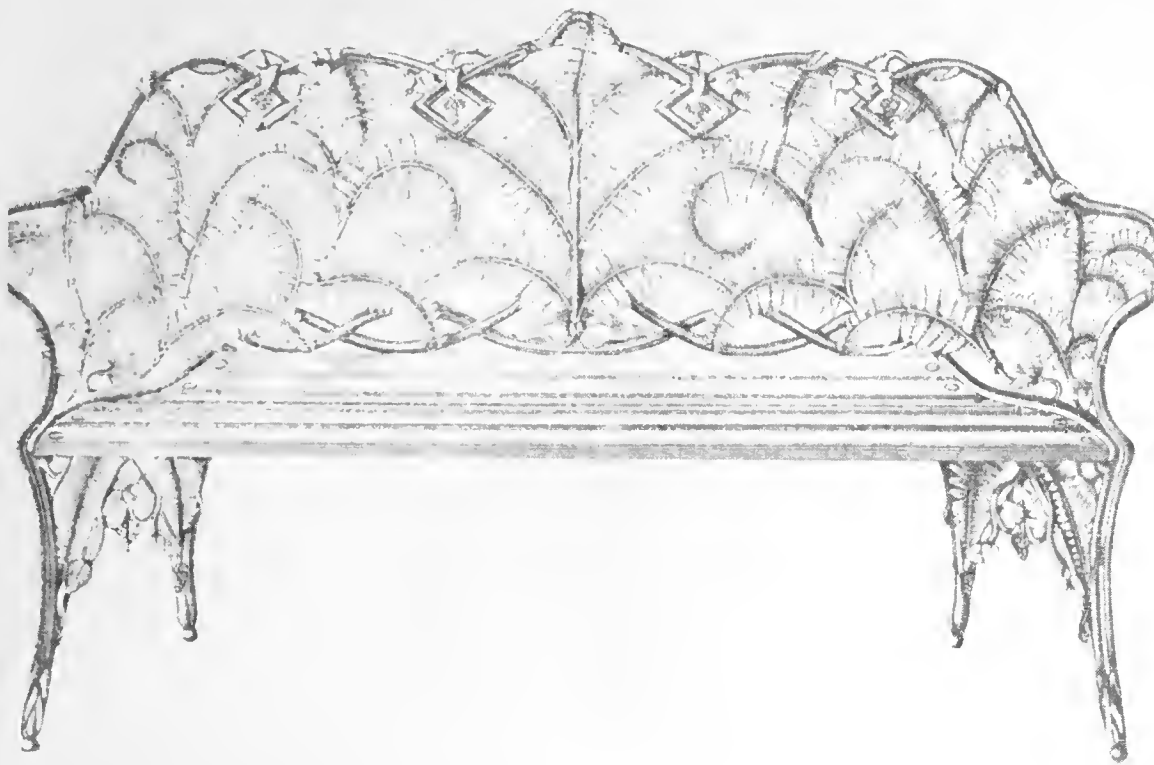
Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than December 19 for February, January 20 for March and February 20 for April.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, extension 20 for details.



Accredited by the
American Association
of Museums



Victorian Gardens

continued from page 1

tors Angela Overy and Rob Proctor have teamed up to present the Victorian style of floral arranging.

The class on making nosegays offers one session *for men only*. Would a valentine bouquet from your own hands be the all-time heart-winner on Valentine Day? The instructors promise to take you through the steps slowly if you're not particularly experienced at this sort of thing. Yes, there'll be another, co-ed session of this class open to all, so this should be

the most personalized Valentine Day in Denver history.

Carol Dawson's class on small-space gardening, "Planting a Peter Rabbit Garden," should be just the spring kick-off for Beatrix Potter fans. Although the instructor does not promise that Peter himself will be at her side, you will leave the class ready and able to grow fine leafy vegetables to tempt him out of his rabbit hole.

(For more information on special Victorian classes consult the "Classes" section of both this and the February newsletter.)

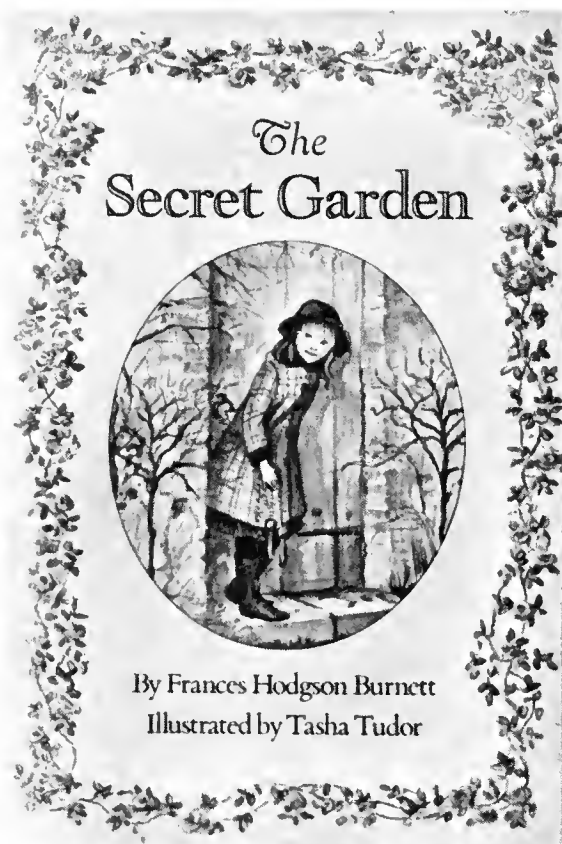
Bring the Family to "The Secret Garden"

In conjunction with "Victorian Gardens," two special showings of the film classic *The Secret Garden* will be shared with members of the Gardens and guests. It will be shown Sunday, February 5, and Saturday, February 11, from 2:00 to 3:30 p.m. in Classroom C at the Gardens.

In this film a young girl who moves to a run-down Victorian estate finds an abandoned garden and devotes herself to it, eventually changing the lives of everyone living there. This 1949 film, directed by Fred M. Wilcox, stars Margaret O'Brien, Herbert Marshall, Dean Stockwell, Gladys Cooper and Elsa Lanchester. It is a black and white film with garden sequences in color.

This film has been a delight to children and adults. Copies of the book, *The Secret Garden*, are available in

Fern settee from "Victorian Gardens" (Photo circulated by SITES.)



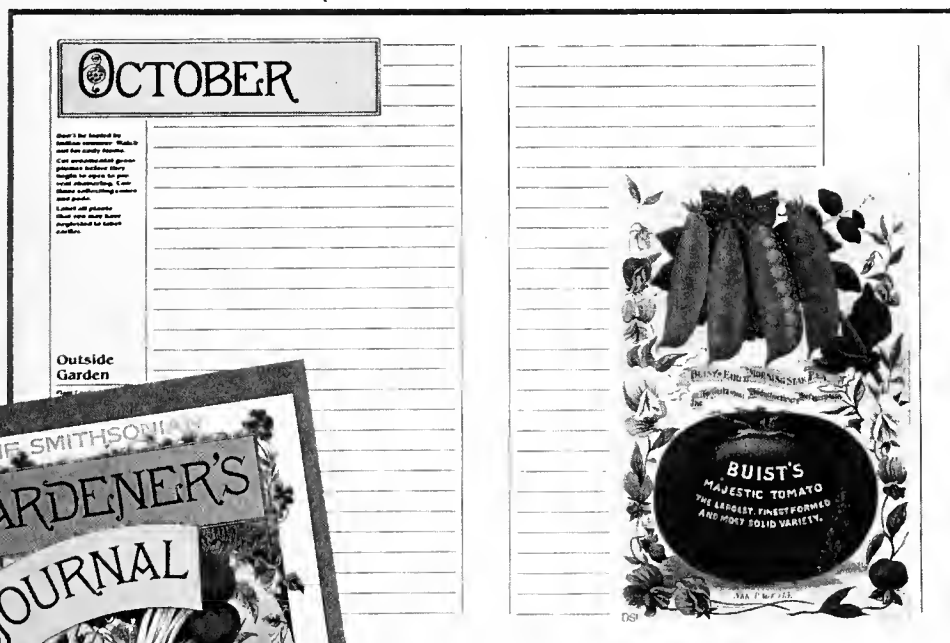
Purchase your own copy of The Secret Garden at the DBG Gift Shop.

the Gift Shop, bookstores and local libraries. You might want to share the book with your children before or after seeing the film.

Reservations can be obtained by returning the registration form in this newsletter. Please indicate how many children and adults you will be bringing. Admission is \$3 for adults and \$1.50 for children six through 15 years old. Reservations must be received by January 30 for the first showing and February 3 for the second showing. Please enclose a stamped, self-addressed envelope for your tickets. If space is available, tickets will be sold at the door.

Consider attending this film as a family affair. *The Secret Garden* is a charming treasure rarely shown in Denver. It is a delightful complement to the exhibit, "Victorian Gardens: A Horticultural Extravaganza."

The Smithsonian Gardener's Journal, an updated diary illustrated with turn of the century seed packets and catalogs from the Office of Horticulture will be in the Gift Shop during "Victorian Gardens."



Everything Is Coming Up Roses—30th Annual Colorado Garden and Home Show

The 1989 Colorado Garden and Home Show is more exciting than ever. Big changes are going to happen in Currigan Exhibition Hall, 1324 Champa, February 3 to 12, when the 30th annual show takes place.

Two-thirds of the main floor will be devoted to 22 feature gardens. The other section of the main floor will consist only of garden-related exhibits. Pathways will be wider for easier access. For the first time thousands of blossoming roses will be the premier emphasis of the show. You can obtain ideas from a special rose garden designed by Jane Silverstein-Ries.

To help you visit and encourage your participation, the not-for-profit Colorado Garden Show, Inc. is offering a special discount to members of Denver Botanic Gardens. On Thursday evening, February 9, from 5 to 10 p.m., members will receive a \$2 discount on the regular admission by presenting the adjacent coupon at the ticket booth. Regular adult admission is \$4.50, \$2 for children (6-12 years old) and \$3.50 for senior citizens (65 and older).

As part of the Denver Botanic Gardens evening, experts will give special presentations on roses, perennials and herbs on the lower level between 7 and 8:30 p.m. Each presentation will last 30 minutes and there will be ample time for questions.

The 1989 show hours are:

Friday, Feb. 3	6 to 10 p.m.
Saturday, Feb. 4	noon to 10 p.m.
Sunday, Feb. 5	noon to 6 p.m.
Monday, Feb. 6 to	
Saturday, Feb. 11	noon to 10 p.m.
Sunday, Feb. 12	noon to 6 p.m.

TICKET

30th Annual Garden & Home Show
"We're Coming Up Roses"
Thursday, February 9,
5 to 10 p.m.

To admit members of Denver Botanic Gardens at \$2 off regular admission per member.

Cut this coupon out and give to attendant at ticket booth—you will need to show your membership card to receive the discount.

Lead Guided Tours—Conservatory Guide Training Begins January 26

Have you ever received a thank-you letter that is three feet by six feet and colorfully illustrated by 20 second-grade students?

Recently several conservatory guides received this thank-you letter, which was boldly displayed at the Gardens. This is what leading educational tours of the Gardens is all about.

Beginning on January 26 a new class of volunteers will be prepared to lead groups on educational tours of Denver's "urban jungle." The training lasts 10 weeks, beginning Thursday, January 26, and concluding March 30. Each session is two hours, with the first hour spent in the classroom and the second hour in the conservatory.

Participating in this class at this time of year has more than one benefit. It's similar to going on a mini-vacation to the tropics and escaping Denver during the traditionally coldest months of the year. But if you

enjoy sharing your knowledge, especially with eager young children, you will be rewarded time and time again.

Guides learn techniques for leading tours as well as botanical and other interesting information about the plants contained in the conservatory. Ongoing "brown-bag lunches" provide additional instruction.

This is a group of active, friendly and enthusiastic volunteers. By joining the program you will immediately begin to develop new friendships. To join, use the education department registration form in this newsletter and mail it to the Gardens with a check for \$25 to cover materials. This will be refunded upon request after 40 hours of guiding.

If you are an expert on plants, great! But, if you're not, that's also OK. You just need to possess a willingness to learn and the ability to provide several hours of time each month. The need for guided tours is increasing, particularly for children in kindergarten through third grades. For additional information call the education department, 331-4000, extension 20.



Community Garden Space is Available Now

Harvest fresh, organically grown vegetables all summer! The season begins soon and now is the time to plan.

The Community Vegetable Gardening Program of Denver Botanic Gardens has space for interested novice and experienced gardeners. As a participant you can cultivate and plant a 150-square-foot plot and you are provided educational opportunities and all of the materials needed to begin growing fresh lettuce, tomatoes or even pumpkins.

A nominal fee of \$30 for DBG members or \$40 for non-members includes

all of the basic materials: tools, fertilizer, water, educational handouts and seeds. Staff members are on hand to answer your gardening questions.

Participants in this program enjoy evening socials and sharing of recipes and techniques. You can meet your neighbors or make new friends while you discuss the habits of your gregarious zucchinis.

If you want to join the 1989 Community Vegetable Gardening Program call Carol Dawson, community gardens coordinator, at 331-4000, extension 42, to obtain additional information. Applications can be obtained from the receptionist at the DBG House, 909 York Street. Space is limited so plan to register early.

One of many thank-you illustrations received by DBG conservatory guides.

Down the Garden Paths in January

Winter is a perfect time to explore the Gardens for plants that have particular, pronounced shapes. Colors are muted and the forms of plants are clearly defined.

Besides being more clearly revealed in a winter landscape, some plants, by their shape alone, make that landscape more beautiful. This is especially true of plants that are emphatically vertical. They add drama to an otherwise quiet scene.

Columnar, upright, fastigate—all are terms used to describe some aspect of a plant that makes it appear narrow. Evergreens of this form make particularly bold statements.

Between the Herb Garden and the main fountain are five 18-foot specimens of *Pinus sylvestris* 'fastigiata', the fastigate Scots pine. Only about four feet across at their base, they make a tall screen in a small amount of space. Nearby, framing the north corners of the Scripture Garden are examples of the 'Skyrocket' Rocky Mountain juniper, *Juniperus*



scopulorum. More conical in shape, but still tall and narrow, are the young Douglas firs, *Pseudotsuga menziesii*. A row of them can be seen west of the peony beds.

The Plains Garden, paradoxically, contains beautiful examples of upright growth. Several species of grasses add vertical relief to the softly rolling landscape. Look for little bluestem, about two feet tall and rosy salmon in color; big bluestem, four to six feet tall near the pond; sideoats grama, with sparse alternating "flags" projecting horizontally from its wheat-colored stems, and, outside the east entrance to the Plains Garden, the dramatic upright plumes of *Erianthus ravennae*, known as hardy pampas grass in the nursery trade, but more properly called ravenna grass.

Of Interest to Members: Programs on Channel 6

A two-hour National Geographic special on Thursday, January 5, at 8 p.m., presents a century of some of the finest film from America's favorite photographic archives. This special captures the wonders of our planet, its habitats and inhabitants.

From the 1920s through the 1960s Robert Moses held almost total control of the New York landscapes. He was a man who thought big but never left out beauty. Bridges, highways, parks and parkways are only a part of this world. See "The World that Moses Built" on Tuesday, January 10 at 8 p.m.

Was the searing summer of 1988 a portent of things to come? NOVA looks at the greenhouse effect and what the increasing global temperatures and rising seas imply for plant and human life. This program will be aired Tuesday, January 17 at 7 p.m.

Plants," to be shown January 28, will feature time-lapse photography of the ingenious and dramatic reproductive techniques of some plants, seeds that walk, mushrooms that glow in the dark and vines that strangle their hosts. On March 11 the series presents "Evergreen," a look at our most enduring of trees, the oldest, tallest and largest of all living things.

A spokesperson for KRMA, the other PBS station in Denver, was unable to tell the *Green Thumb News* when the two plant-related programs would air on Channel 6. However, the first show of the series will not air until January 19, so we alert members to check the Channel 6 schedule approximately a week and a half later than the show dates set for Channel 12.

We encourage members to view and support these botanical programs on Wild America. "I've studied animal behavior for years," Mr. Stouffer admits, "but not until recently did it occur to me that there was such a thing as plant behavior." With this, its seventh season, Wild America departs from its animals-only focus. We're looking forward to these and later segments on the fascinating world of plants.

Snow magic

Summer Interns

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this program, additional information can be obtained by writing:

Patricia A. Pachuta
Education Director
Denver Botanic Gardens
909 York Street
Denver, CO 80206

To qualify, an applicant must have completed the sophomore year of college with a grade point average of at least 2.5 on a scale of 4.0 and must be currently enrolled as either an undergraduate or graduate student. Several introductory courses in botany and horticulture are prerequisites. A taxable stipend of \$2,000 will be paid to each intern for the 10-week term.

All application materials are due March 1, 1989, and notification of appointment will be mailed by the end of that month.

In addition to the regularly scheduled work activities of the internship, classes, field trips, lectures and demonstrations are planned. This is an opportunity to work in a professional environment and to exchange ideas with others in similar areas of study. It can be an exciting summer and you receive from the program at least as much as you give the program.

Wild America to Feature Plant Kingdom On Channel 12 January 28, March 11

Wild America, Marty Stouffer's popular PBS television series on America's wild creatures and places, will feature two half-hour shows this season on the Plant Kingdom. This should be welcome news to members of the Gardens. How often have we been disappointed that "wildlife" and "nature" shows consistently ignore the amazing plants of our planet.

KBDI Channel 12 will air the series at 7:00 p.m., Thursdays, January 7 through March 11.

The segment titled "Peculiar

Gloria Falkenberg at a previous "Magic of Herbs" presentation.



Herb Society of America Honors Gloria Falkenberg

Honored on June 27, 1988, for 30 years of commitment to herbal knowledge and horticulture was Denver Botanic Gardens Board of Trustees member and former Director of Development, Gloria Falkenberg. Mrs. Falkenberg received the distinguished Certificate of Achievement Award at the society's annual meeting in Milwaukee.

The Herb Society of America was founded in 1933 for the purpose of furthering the knowledge and use of herbs and contributing the results of the experiences and research of its members to the records of horticulture, science and related arts. The motto of the society is "for use and delight." The society is concerned with cultivation of herbs and distribution of herbal education. Some of their projects include the establishment of herb gardens (private and public) for education.

Mrs. Falkenberg's commitment to herbal education began 30 years ago as a founding member of the Denver Botanic Gardens Guild. She, along with other founding members of the Guild, developed the original Herb Garden at DBG, which began as a simple model garden and grew into the nationally recognized garden of today. Currently, the Guild oversees activities in the garden that include the harvesting of herbs for various fund-raising events for the Gardens.

Through her activities with the Guild her knowledge developed and Mrs. Falkenberg became well-known

as a resource person for the Front Range of Colorado. She remains active with the Guild, has been a member-at-large of the Herb Society of America since 1972.

Mrs. Falkenberg has presented herb programs all along the Front Range of Colorado, including Colorado State University and DBG. She has developed fact sheets and a poster on herbs that she distributes at her lectures. Her popular presentation, "Magic of Herbs," has been enjoyed by many. Her basic premise about herbs is that "every plant is a delight and every plant has a use." Her every activity re-emphasizes her philosophy.

Winners of the Jane Silverstein-Ries Awards Announced

The Colorado Chapter of the American Society of Landscape Architects awarded its annual Jane Silverstein-Ries Awards to the Colorado Inactive Mine Reclamation Program and to Gudy Gaskill of the Colorado Trail Foundation, according to the society's president-elect Guenther Vogt. The Jane Silverstein-Ries Award is given annually to non-landscape architects who have demonstrated a stewardship of land in the Rocky Mountain region. The awards were presented at the society's annual dinner on December 2 at the Oxford Hotel.

The Colorado Inactive Mine Reclamation Program, part of the Colorado Department of Natural Resources, is charged with reclaiming lands af-

fectured by mining activities. Since its establishment in 1980 to address the hazards and environmental problems arising from abandoned mines, the program has completed 88 projects, safeguarded 806 abandoned mine openings and reclaimed 853 acres of inactive mined land. It works closely with a variety of mining companies, local historical associations and concerned individuals to preserve and enhance historical mining resources. It received the Jane Silverstein-Ries Grand Award.

Gudy Gaskill, chair of the Colorado Trail Foundation, received the Jane Silverstein-Ries Merit Award for her years of leadership of the Colorado Trail Foundation. Ms. Gaskill has been the key force behind establishing North America's newest long-distance hiking trail. The Colorado Trail spans half the state, extends nearly 500 miles, crosses five major river systems and six wilderness areas. Ms. Gaskill has been involved in all aspects of this trail development from developing the concept for the trail to shaping the organization to providing food, tools and encouragement for the thousands of volunteers who worked over the past 15 years to build it.

The Colorado Chapter of the American Society of Landscape Architects established the Jane Silverstein-Ries Award in 1984 to encourage, promote and recognize individual and organizational efforts in preserving, maintaining and enhancing Colorado's public lands. Previous winners of the award include Joanne Ditmer, George Kelly and the Colorado Federation of Garden Clubs.

Victorian Extravaganza

Planting a Peter Rabbit Garden

(three sessions)

Tuesdays, February 7, 14, 21
7 to 9 p.m.

DBG's Morrison Center

Get a jump on spring and find out how to grow carrots, peas, lettuce, cabbages and other vegetables just like Mr. McGregor. Learn how to plan and plant an urban vegetable garden using small space techniques such as wide row spacing, successive planting and intercropping. You'll be able to grow more produce in your city garden than you ever thought possible!

In addition, non-chemical approaches to soil improvement and fertilizing as well as pest control will be covered. Sources of appropriate plant varieties will also be included.

Instructor: An avid horticulturist and teacher, Carol Dawson has worked on the DBG staff in the Community Gardening Program for the past two years.

Fee: \$24 members/\$26.50 non-members



Old Roses for Modern Gardens

(two sessions)

Wednesdays, February 1, 8
7 to 9 p.m. Classroom A

Roses have been the focus of gardens from antiquity to the present day and the interest in their development has a colorful documentation fascinating to history buffs. These Old Garden Roses are still available, a pleasure in any landscaping and indispensable to the old house-garden restorer.

The Victorian Era saw the institution of the still famous gardens of Europe containing Gallicas, Damasks, Bourbons, Mosses et al. This course will cover rose evolution and relationships, landscape use, growing, exhibiting and sources and a complimentary Old Garden Rose for each participant.

Instructor: Dr. William Campbell is a surgeon long-devoted to rose growing and has taken a historian's interest in roses to the ownership of a major specialty nursery since 1971. He is active with the rose societies of Colorado and is on the American Rose Society's Old Garden Rose Committee.

Fee: \$16 members/\$17.50 non-members

Victorian Style—Flowers and Follies

(three sessions)

Tuesdays, January 24, 31 and
February 7

9:30 to 11:30 a.m. Classroom B

The Victorian passion for flowers will be explored while the student learns how to create period flower arrangements of the Victorian Era. Included in this demonstration course will be a lavish dining extravaganza, nosegays, Victorian baskets and flowers for other special occasions such as a ball and tea.

Learn the Victorian language of flowers as well as their special meanings.

Instructors: Artists Angela Overy and Rob Proctor are very popular DBG instructors with extensive design and teaching experience.

Fee: \$24 members/\$26.50 non-members

Victorian Posies: Make a Nosegay for Somebody You Love

(one session)

Monday, February 13
1 to 3 p.m. Classroom B

In this workshop students will create a vintage-looking "tussie-mussie" to take home with appropriate Victorian valentine flowers, ribbon and lace. A loving reception is guaranteed!

Instructors: Angela Overy and Rob Proctor

Fee: \$23 members/\$26.50 non-members (includes a \$15 materials fee)

Victorian Posies: Make a Nosegay for Somebody You Love

(one session especially for men)

Monday, February 13
7 to 9 p.m. Classroom B

If Phil Donohue or Alan Alda knew about this class, they'd be sure to attend. Real men aren't afraid of showing their feelings on Valentine Day: Don't be intimidated. Create a charming expression of your love for your sweetheart. All materials and flowers plus LOTS of help will be provided.

Instructors: Angela Overy and Rob Proctor

Fee: \$23 members/\$26.50 non-members (includes a \$15 materials fee)



The Secret Garden

(one session)

Section I: Sunday, February 5
Section II: Saturday, February 11
2 to 3:30 p.m. Classroom C

Please indicate your section on the registration form.

The film *The Secret Garden* can be enjoyed at the Gardens in conjunction with the Smithsonian Institution exhibit, "Victorian Gardens: A Horticultural Extravaganza."

This 1949 film stars Margaret O'Brien as a young girl who moves to a run-down Victorian estate and devotes herself to an abandoned garden that she discovers. It is a classic that should be shared by the entire family.

Reservations can be obtained by returning the registration form in this newsletter. Please send a stamped, self-addressed envelope to the Gardens along with your check and registration form, by January 30 for the first section and February 3 for the second section, and your tickets will be returned immediately. If space is available, tickets will be sold at the door. (See article in this newsletter for more complete information.)

Fee: \$3 adults/\$1.50 children six through 15 years old

For additional information: Call 331-4000, extension 20



CTA'SSIES

Winter
1989
Denver Botanic Gardens



Panayoti Kelaidis will share rock gardening information with DBG students.



Garden Design: An Artist's Approach

(four sessions)

Tuesdays, February 21, 28, March 7, 14

7 to 9 p.m.

Classroom C

Gardening is more than finding the right spot for the right plant. How plants relate to one another in the garden, and the effects that can be achieved with color, form and texture will be explored.

The focus of this course is the artistic aspect of gardening, with each segment addressing a specific topic in garden design.

Tuesday, February 21
"Color in the Garden"

The use of color is a personal expression, and it can produce serene or explosive effects. Color combinations can be either subtle or daring. Classic color schemes and some unusual ones will be presented, as well as the flowers that create contrast or harmony.

Tuesday, February 28
"Combining Annuals and Perennials"

Traditional perennial gardening often excludes annual flowers. This is a shame since annuals can be a real asset to the herbaceous border. This session will describe how to incorporate them into perennial plantings to contrast, unify or accent. Tall, medium and short varieties will be featured to supplement existing plantings and as star performers themselves.

Tuesday, March 7
"Color in the Shade"

Nothing is as worrisome to the gardener as a shady bed. The choices for deep shade are somewhat limited, but through the use of annuals, perennials, bulbs and containers, the creative gardener can achieve lovely results. The partially shaded garden has huge potential for glorious color and there is a wealth of plants well suited to Denver.

Tuesday, March 14
"A Season of Bloom"

The goal of every gardener is to enjoy flowers throughout the growing season. Too many gardens peak in early summer. This session will concentrate on how to achieve maximum color from spring to frost, and beyond. Perennials with extended blooming periods and varieties for late summer and autumn flowers will be covered.

Instructor: Rob Proctor creates art in his garden and art from his garden. His botanic drawings hang in the Smithsonian Institution as well as in collections throughout the world. Rob draws his inspiration from his award-winning garden, which will be featured in an upcoming issue of *Fine Gardening*.

Fee: \$32 members/\$35 non-members

Denver Street-Side Structures

(one session)

Monday, February 27

7 to 8:30 p.m.

Classroom C

Take a visual stroll through the history of our Denver streets noting common themes and unique details that have developed over time and helped shape our landscapes. "Denver Street-Side Structures" is a slide program featuring patterns of paving, walls, fences and gates found in old Denver residential neighborhoods. The details range in character from sophisticated to primitive and from conservative to unconventional.

Instructor: Kathy Hamilton is a local landscape architect and a great fan of these street-side gifts to our community.

Fee: \$6 members/\$6.50 non-members

The Four-Season Rock Garden

(four sessions)

Mondays, March 6, 13, 20, 27

7 to 9 p.m.

Classroom C

Everybody loves a rock garden in the spring. After a long, cold winter, nothing gives more pleasure than those first tiny bulbs and showy, early mats of color. The most successful rock gardens, however, are planned for flowering at all seasons. Even when not in bloom, a proper selection of rock plants will have interesting foliage, textures and colors.

This class is organized to provide the homeowner with the information needed to create a truly year-round garden.

Learn which plants produce waves of blossoms in the spring and maximize their effect. Find out which summer-blooming rock alpine plants from Asia, the southwestern United States and South Africa have tested successfully in our Rock Alpine Garden. Discover which rock plants, from asters to zauchnerias, bask in the balmy days and cool nights of autumn. Plan for winter interest with dwarf conifers and tough plants that will actually flower when the weather is mild.

Instructor: Panayoti Kelaidis is curator of our award-winning Rock Alpine Garden as well as an enthusiastic teacher who enjoys sharing discoveries gleaned from his eight years at Denver Botanic Gardens.

Fee: \$32 members/\$35.50 non-members

Deciduous Shade Trees for Denver

(six sessions including a field trip)

Tuesdays, January 31, February 7, 14, 21, 28

7 to 9 p.m. Classroom A and field trip on Sunday, March 5 from 1:30 to 4:30 p.m.

This class will acquaint students with over 60 species of shade trees well-suited to the climate of Denver. Learn about their characteristics, natural history, culture, problems and landscape value.

Through the use of slides, students will observe each of the species, with an emphasis on winter structure. A field trip is included for a first-hand look at many of the plants discussed in class.

Instructor: Jeffrey Frank studied horticulture at Pennsylvania State University and earned a master's degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

Fee: \$45 members/\$50 non-members

Rocky Mountain Residential Xeriscape

(six sessions)

Section I: Thursdays, Feb. 9, 16, 23, March 2, 9, 16

Section II: Wednesdays, March 22, 29, April 5, 12, 19, 26

7 to 9 p.m. Classroom B
Please indicate your section on the registration form.

Learn how to plan the ideal Rocky Mountain landscape. A private yard

can provide recreation, privacy, food production and beauty while requiring surprisingly little water and maintenance.

After several slide programs on sensible landscape design and appropriate plant materials, students will analyze their own sites and begin to develop a personal plan. The major emphasis will be on skills for "do-it-yourself" site planning and planting design.

Specific topics will include sketching from slides and drawing plans; selecting plants; estimating water consumption and bills; starting from scratch and reworking existing landscapes; attracting and controlling wildlife; edible xeriscape; and xeriscape for all seasons.

Instructor: Jim Knopf is a landscape architect who has designed many local residential landscapes with low-water demand plants. He is the author of *Edible & Useful Wildplants of the Urban West* and has extensive teaching experience.

Fee: \$48 members/\$53 non-members

Limit: 12

Beginning Bonsai

(four sessions)

Thursdays, February 16, 23, (skip March 2), March 9, 16

7 to 9 p.m.
DBG's Morrison Center

This introductory course will cover the history and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of

bonsai will be included.

Each student will take a completed bonsai home and all materials will be provided.

Instructors: Keith Jeppson, past president of the Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 16 years. Harold Sasaki is a commercial bonsai grower with 18 years of experience. Both are lively, capable teachers with much experience.

Fee: \$54 members/\$59 non-members (includes \$22 for materials)

Limit: 16

Basic Beekeeping

(two sessions)

Mondays, Feb. 27, March 6
7 to 9 p.m.

DBG's Morrison Center

This two-session class is designed to show the beginner how to get started in beekeeping. Through a step-by-step approach with lectures and hands-on demonstrations, students will learn the entire procedure from set-up to honey harvest.

A discussion of interesting facts about honey plants, bee behavior and ecology will also be included.

Instructor: DBG Community Gardens Coordinator Carol Dawson has kept bees for five years.

Fee: \$16 members/\$17.50 non-members

Chair Caning

(five sessions)

Wednesdays, February 1, 8, 15, 22
March 1

7 to 9 p.m.
DBG's Morrison Center

Learn an age-old craft. Replace that sagging or broken seat in your hand cane, pressed cane, rush or reed chair. With homework, you'll be able to complete at least one project during this course.

No previous experience is necessary. Materials will cost approximately \$10 to \$20 and can be purchased at the first session. The instructor will contact each student prior to class to discuss individual projects.

Instructor: Jill Goldberg is a self-proclaimed "cane addict" who learned the art from her mother. She has taught numerous courses and operates her own business, "The Able Caner."

Fee: \$40 members/\$44 non-members
Materials are purchased separately and depend upon individual projects.



*Mysteries exist
in deepest,
darkest conser-
vatory locations.*



Further Techniques in Botanical Illustration

(five sessions)

Saturday, January 14, 21, 28,
February 4, 11

1 to 3:30 p.m. Classroom B

Spend Saturday afternoons capturing the Gardens' bountiful floral beauty in your drawings. This course is designed for amateur or working

artists with advanced drawing skills. Previous botanical illustration classes are necessary, but may be waived with the permission of the instructor.

Focusing on accuracy, style and composition, students will work with colored pencils or watercolors.

Please bring two drawing pencils (2B and 3H), an eraser and either a colored pencil set (Berol Prismacolor

is recommended) or watercolor materials. A drawing pad will be provided.

Instructor: Rob Proctor is a Boettcher Scholar who studied at the University of Colorado. He has held one-man shows in three countries and his botanical drawings and watercolors hang in many collections throughout the world.

Fee: \$56 members/\$61 non-members (includes \$6 for materials)

Limit: 15

Watercolor Painting

(five sessions)

Wednesdays, February 15, 22,
March 1, 8, 15

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Classroom B

Please indicate your section on the registration form.

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: 1½-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$60 members/\$66 non-members

Limit: 12

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Gardening: A New Year's Resolution

This time for new beginnings and new resolve is an especially exciting time for us gardeners. The new year is germinating. New seed and nursery catalogs are arriving in our mailboxes nearly daily, and they fill our long, dark winter evenings with anticipation.

However, while others resolve to order and plant dozens of exotics, we should make a different resolution and set aside our catalogs for a moment to consider a few publications of a different type. Some are old and well-known. Others have just arrived. Catalogs often offer a wealth of horticultural advice but it's time that we in the Rocky Mountain West contemplate our gardening much further into the future than this spring's planting or the satisfaction of the harvest from a single summer. You know that we garden in a special place and we need a special direction. These writings may help us find it.

In 1951 the Green Thumb Council, a group headquartered, not coincidentally, in the same building on Bannock Street as the organization that one day was to blossom into Denver Botanic Gardens, published a paperback, *Rocky Mountain Horticulture is Different*. A manifesto of sorts, as its instructional name implies, its author is George W. Kelly whom many consider the first director of the Gardens, though he never held the formal title. (The booklet has gone through many revisions and is now identified as *Rocky Mountain Horticulture*, published by Pruett Press.)

It was a far-ranging collection of Mr. Kelly's writings on many facets of growing ornamental and food plants around the home. Nearly 40 years after its publication its horticultural advice remains sound, and its primary message is more urgent than ever. As Mr. Kelly pointed out in his first preface, "Our greatest needs are two: learn how to better adjust our existing climatic conditions to the valuable plants that we bring into this country, and to discover and adapt plants which will tolerate Rocky Mountain and Great Plains conditions."

Mr. Kelly rightly observed that usually we won't discover these things in gardening books and catalogs written by authors from Britain or the eastern United States. This observation is not a denigration of their horticultural knowledge or their literary skills. However, they write from far different experiences, for Atlantic coastal gardeners or those who cultivate the rich, dark soils of the Midwest. In general their benign skies release over twice the life-giving pre-

cipitation that falls from our own beautiful, clear, blue, grudging Western heavens.

On the other hand, Mr. Kelly's book was born of his gardening experiences in and around Denver. It is a foundation upon which we can build our understanding of the horticultural demands particular to us, and we can learn from him many lessons.

More restricted in scope is a slight book published in 1975 by two Colorado landscape architects: *Grow Native*, by Sam Huddleston and Michael Hussey. It narrows the discussion of Rocky Mountain horticulture to "care-free" landscaping with native plants and plants easily adapted to our soils and climate.



This is its most important contribution. The book is valuable if it imparts to other landscape architects and to gardeners this belief attributed to one of the authors: "Man has no alternative but to work harder to adjust his lifestyle to the environment, rather than vice versa; and the use of appropriate plants is an important key. . . ."

The choice of these plants is aided greatly by the descriptive and tabular information for nearly 50 different species that depends little or not at all upon supplemental watering when planted in our area. However, given the authors' occupation, it's surprising how little consideration they give to designing gardens for our special environment.

This is addressed beautifully in a new book by Carole Otteson, *The New American Garden*. It bills itself as a manifesto. It is that, although the revolution the author calls for began nearly 40 years ago and here on the Western front is already marching toward victory.

Although she is an Eastern writer, Ms. Otteson declares clearly and

firmly the concepts we must consider and adopt here and in the rest of the country if we are to garden in peace with our environment. In Chapter 1, "The Garden as Landscape/The Landscape as Garden" (The title itself is a forceful indication of our future direction) she defines an American garden as we can and should realize it.

"Emerging all over the country, American-style gardens brim with soft, full, relaxed—often wild—plantings that complement the local landscape, adapt to regional growing conditions, and respond to seasonal change. These are gardens that express themselves in the vernacular, often using native plants and drawing inspiration from the natural setting, rather than from conventional gardening models. They are nostalgic gardens, restoring the unique flora of a new land."

This is an exciting book. It speaks of exciting gardens, beautiful gardens, gardens easy to care for. It's a book that translates easily into a treatise for horticulture special to the Rocky Mountains and High Plains.

Let one other publication have your attention temporarily before you return to your new seed catalogs. The Denver Water Department 1989 Calendar is much more than its name implies. Its text covers, albeit briefly, the major considerations for wise horticulture, particularly for our region. You can pick up your free copy of the calendar at the Gardens.

Again this year it is a colorful testimony to the xeriscape movement, which encourages the use of plants that need little water in innovative landscapes designed especially to achieve beautiful surroundings in harmony with a restrictive climate. The calendar makes a good case for this hopeful message: "Xeriscape can be accomplished with no sacrifice in appearance. Designed with care it can make your property the most attractive in the neighborhood—and give you time to play while your neighbors weed, water and mow."

This is interesting reading as we contemplate the new year. Stir the compost of memories you heaped up through the growing season of 1988. Think over the times you've wished your garden were more attractive, less wasteful of water, more forgiving of your busy schedule, less demanding of daily work and more compatible with the protective feeling you have toward our Western environment.

It's the season of renewed beginnings. The publications discussed here can help us make them in the right direction.

Larry Latta
Botanist-Horticulturist
Denver Botanic Gardens

C A L E N D A R

JAN

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Happy New Year—DBG closed

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Happy New Year!

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Watercolor Painting*

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Further Techniques in Botanical Illustration*

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Victorian Style—Flowers and Follies*

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Conservatory Guide Class*

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January 28-February 15 "Victorian Gardens—A Horticultural Extravaganza"

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Deciduous Shade Trees for Denver*

*First meeting of a class with more than one session

Coming Next Month

February 1 Chair Caning*

February 5 *The Secret Garden*

February 3-12 Garden and Home Show

February 7 Planting a Peter Rabbit Garden*

February 9 Rocky Mountain Residential Xeriscape*

February 11 *The Secret Garden*

February 13 Victorian Posies: Make a Nosegay for Somebody You Love

February 15 Watercolor Painting*

February 16 Beginning Bonsai*

February 21 Garden Design: An Artist's Approach*

February 22 Annual Dinner

February 27 Basic Beekeeping, Denver Street-Side Structures

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE

January 1989



Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switch-board during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

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Victorian Extravaganza Remains Until February 15

The first visitors to "Victorian Gardens: A Horticultural Extravaganza" at Denver Botanic Gardens have been as delighted to discover the wealth of information on Victorian-era plants as the early botanists were to discover the plants.

This exhibit from the Smithsonian Institution will be at the Gardens until Wednesday, February 15. Several classes and events are scheduled to complement the plant-enhanced panel display in John C. Mitchell II Hall.

The 1949 film, *The Secret Garden*, will be shown on Sunday, February 5, and Saturday, February 11, from 2 to 3:30 p.m. Share the enchantment of this film with your family and later share the book with your children. Adults can attend for \$3 each and children six to 16 can accompany their parents (or other adult) for \$1.50 each. See your January newsletter for complete information (or see the announcement in the "Classes" section of this newsletter). If space is available, tickets will be sold at the door.

Victorian-era furnishings from the Colorado Historical Society complement the exhibit by helping to create the mood of elegance. A plant display in the lobby court will surprise you. Many of the plants commonly used today have been used since the mid-to late-1800s.

Make a decision to visit "Victorian Gardens" at Denver Botanic Gardens before it leaves on February 15. Gardeners, artists and historians will be especially interested in the perspectives introduced by the Smithsonian Institution.

Groundwater Symposium at the Gardens March 6 and 7

What does the term groundwater mean? You've read it in the newspapers and heard it on the news. You've learned it's being contaminated, it's being depleted and that there is a groundwater overdraft, but what does this mean and how will it affect you?

On Monday, March 6, from 1 to 4:30 p.m., and Tuesday, March 7, from 9:15 a.m. to 4:15 p.m., Denver Botanic Gardens and the Colorado Federation of Garden Clubs will co-sponsor "Groundwater—A Need to Know" at the Gardens in John C. Mitchell II Hall. This 1½-day symposium will attempt to answer your questions
continued on page 2

Green Thumb



NEWS

Denver Botanic Gardens

February 1989

Number 89-2



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Emerson R. Birchfield returns
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Helen Fowler Library
page 10

2 Groundwater

continued from page 1
and clarify the issues.

The brief program for a complicated subject will define groundwater. It will identify and explain terms of groundwater and hydrology as well. Learn about recharge, aquifers and reservoirs.

More important than learning the terms is becoming more informed about the issues and their significance. Legislative representatives will present state and national perspectives while local experts will discuss the value of groundwater.

How is the groundwater contaminated and how can it be cleaned up—or can it? Again, experts will discuss these issues allowing time for questions. The abuse of and depletion of our groundwater resources have created a need to know; you should not miss this informative program. The issues in this symposium are as timely as are the answers.

Registration is \$18 and it includes lunch on the second day. Additional details can be obtained by calling Joan Franson, 424-3942, or Joanne Roncka in Fort Collins, 223-3756. Flyers, complete with agendas, will be available at the Gardens in February and at the Garden and Home Show.

Seasonal gardeners are needed to help maintain the Gardens.



Chatfield Arboretum Needs Naturalist Guides

Chatfield Arboretum will conduct two series of training sessions for volunteers who would like to join its highly successful Naturalist Guide program this spring. Beginning February 16 and February 18 the classes will be held on following Thursdays and Saturdays and will encompass 10 weeks of training for each series.

For information about this enjoyable, valuable volunteer service call Dr. Wayne Christian, Assistant Director of Chatfield Arboretum, at 973-3705.

Seasonal Gardeners Wanted

Full-time seasonal gardeners may begin in 1989 as early as March and Denver Botanic Gardens is now taking applications for these positions. A minimum of one season of gardening experience in the Denver area and the ability to work outdoors 40 hours per week in the early spring and throughout the summer are requisites. Pay ranges upward from \$4.50 per hour depending upon experience. Call the Gardens receptionist at 331-4000 for information. Applications must be received by February 28, 1989.

Tributes

In honor of Mr. & Mrs. Field C. Benton
James Benton

In memory of Carl Allen
Associates of Denver Botanic Gardens

In memory of Elizabeth H. Bardwell
Beverly H. McConaty

In memory of Claire McMenamy Berger

E.H. Hilliard, Jr. family

In memory of John Baimonte
Janice Upp

In memory of William T. Blackburn
Mr. & Mrs. John C. Mitchell II

In memory of Miss Mary Bogue
Mr. & Mrs. John C. Mitchell II

In memory of Myrtle Bracken
Dorothy Stone

In memory of Mr. & Mrs. E.L. DeLand
Mr. & Mrs. Gene H. Thomas

In memory of Elke Dicintio
North Metro YWCA

In memory of Mrs. William D. Embree, Jr.

Mr. & Mrs. John C. Mitchell II

In memory of Mrs. Elizabeth Farrow
R. Michael Collard

In memory of Frederick Gorder
Marion Humphrey

In memory of Stella R. Latham

Charles Dieterle
Harriet J. Latham
Dale & Blanche Romine
Shizuko Sumi
A.E. and Alma Sword
Jeane Sword

In memory of Dorothy K. McGlone
Forrest G. McGlone

In memory of Elizabeth Melzer
Bruce and Pat Paton

In memory of Joe K. Miller, Jr.
Mr. & Mrs. William Collister
Dr. and Mrs. E. Plattner

In memory of Mrs. Davis (Ellen) Moore
Mr. & Mrs. Barkley L. Clanahan
Mr. & Mrs. Charles C. Gates
Mr. & Mrs. John C. Mitchell II

In memory of Mrs. Ruth Robison
Mr. & Mrs. William E. Phelps

In memory of Samuel S. Sherman, Jr.
Mr. & Mrs. John C. Mitchell II

In memory of Kim Sterne
Darcy Chase Sterne

In memory of J. William Tempest
Mr. & Mrs. Charles C. Gates

In memory of Mrs. David C. Wilhelm, Sr.
Mr. & Mrs. John C. Mitchell II

Green Thumb News Number 89-2 February 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than January 20 for March, February 20 for April and March 20 for May.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, extension 20, for details.



Society for Siberian Iris Presents Award to Harry Kuesel

The Society for Siberian Iris, an organization with nationwide membership, has honored Denver Botanic Gardens Trustee Harry Kuesel with its 1988 Distinguished Service Award.

Mr. Kuesel has long contributed his active service to not only the SSI but to many other botanical societies as well, including the American Iris Society, American Hemerocallis Society and American Peony Society. At one time or another he has held leadership positions in these and other societies; he was president of the SSI from 1983 to 1985.

As a trustee, Mr. Kuesel's special interest at the Gardens is in improving its botanical collections. He has been instrumental in the initial development and continued plant acquisition for both the iris and daylily collections, and throughout the growing season can often be found there contributing his gardening skills as a volunteer. Mr. Kuesel's interest in the species iris and his many contacts in the botanical world have also been of immeasurable benefit to the Rock Alpine Garden, which has acquired many unusual species through his efforts.

Mr. Kuesel's contributions to the Society for Siberian Iris, distinguished though they have been, comprise only a small part of his dedication to horticulture and botany. His award reflects upon his efforts for the Gardens as well.

Programs on Channel Six of Interest to Members

Channel Six will present nearly 100 of the best episodes of the most-watched television series of all time, the National Geographic Specials. From the majesty of the Rocky Mountains to the breathtaking beauty of a Polynesian paradise, the photographers of National Geographic explore the most fascinating and fragile of the earth's habitats. These specials will be aired on Thursday evenings at 8:00, beginning February 26.

Aspen's Marty Stouffer returns for a seventh season of the rare and the disappearing, the amazing and the astonishing—some of nature's most captivating creatures nestled in the beauty of North America's bountiful wilderness. This popular program, Wild America, can be seen Thursday evenings at 7:30.



The Board of Trustees of Denver Botanic Gardens Cordially Invites you to attend The Denver Botanic Gardens Annual Members' Meeting and Dinner

Wednesday, February 22, 1989
in
John C. Mitchell II Hall

Cocktails 6 p.m.

Dinner at 6:45 p.m.
followed by a brief meeting

Guest speakers are
Carolyn and Don Etter, Manager,
Denver Parks and Recreation
"Denver Parks and People—Bridging the
Turn of the Century"

Reservations \$23 per person
Cash Bar



Reservations should be made using the attached reservation form and it must be postmarked by February 15, 1989.

Please mail with check to Denver Botanic Gardens, 909 York Street,
Denver, CO 80206.

Members' Annual Meeting Reservation Form

Enclosed is \$_____ for _____ member(s) for the DBG Annual
Members' Meeting and Dinner.

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Help for "February Madness" at the Gardens

February madness. Gardeners and writers often refer to this month, and part of March, as the months in which gardeners do strange things. Some patrol the borders of their yards, wearing deep trails in the snow, in search of green. Others, during those brief, tempting days when the snow clears and the warm winds invite us outside, behave like fools and visit nurseries for the hardiest of perennials to plant in the slightly thawed ground. This type of gardener may in his eagerness plant the same species several times before it actually begins to thrive.

Many readers of this newsletter are often victims of "February Madness," an embarrassing time of year. Help can be found in the pages of this newsletter or in other sources. There's no cure other than April, but there are treatments to relieve the symptoms.

You can do what some do and begin to plan. Throw your creative energies into preparing for the months ahead. This can be done by attending some of the classes provided through the education department. There is a good selection in this issue. You can also use the resources in the library to plan. The selection of catalogs is at its peak, the beautifully illustrated gardening books are plentiful and the librarian is resourceful and sympathetic.

Some members have formed close bonds with others suffering from the same disorder. On the "Calendar" page of the newsletter is a listing of plant societies who meet at the Gardens on a regular basis. Or, you can give a membership to a friend who is just becoming interested in gardening and the two of you can stroll the grounds at 1005 York Street and wear a path in the Gardens' snow rather than your own yard while searching for green. Every year we see visitors supporting each other as one attempts to assist another through the "February Madness." Some members volunteer and assist with the Plant and Used Book Sale. The chairman of this annual event has suggestions on how to become involved. But a few innovative members have found support in unusual places, such as forming bonds with their aerobic instructors and sharing plants, books and catalogs.

Or, you may do as many have done before. Find a soft chair in a room with no windows, pop up a huge bowl of popcorn and buy a big box of chocolate, and work your frustrations away while reading gardening articles. A good place to begin is the "Gardening" column on page 11 in this newsletter.

If you're sensitive to the problem, you might wear a badge stating "Treat me with care—it's February."

1989 Plant and Used Book Sale Chairman Rob Proctor

Volunteers are needed to assist at the Plant and Used Book Sale.

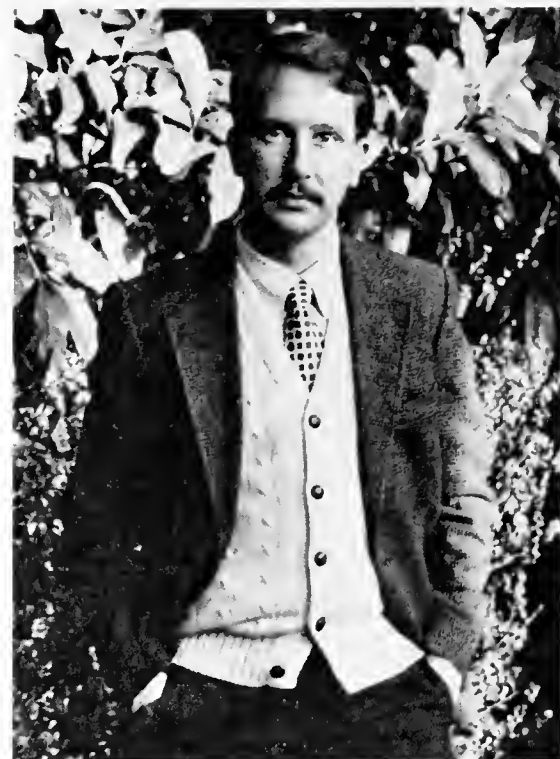
From Your 1989 Plant and Used Book Sale Chairman

The fragrance of paperwhites and evergreen boughs pervades the air as I write this. Soon these will give way to snowdrops, crocus and the sweet smell of daffodils. For the gardener, each season carries with it traditional themes of color and scent.

A good tradition for all of us, our annual rite of spring, is "The Flowering of Denver," the 40th Plant and Used Book Sale. This year the sale is on Friday and Saturday, May 12 and 13. From its humble beginning, our sale has grown to become the largest of its kind in the world. Through the efforts of dedicated volunteers, the sale has become a city-wide celebration. We offer the best in flowers and accessories in the most beautiful marketplace imaginable—the Gardens.

I would like to extend a personal invitation to all our members to participate in "The Flowering of Denver." As a volunteer, you may shop as a preferred customer on Thursday afternoon, May 11, from 3 to 5 p.m. We also offer a training program in April specifically tailored to provide an understanding of the plants available in individual divisions. For example, if you would enjoy working with annuals, we will teach you about flowers for various exposures, and for cutting, fragrance or drying. Or you may learn to pot up cheerful flowering baskets.

Lest you assume that gardening expertise is a prerequisite, we also need volunteers for cashiering, customer service and secretarial duties.



To participate, please contact the Gardens at 331-4000, extension 48, leaving your name, address and phone number with Karen Cuda. Our volunteer coordinator, Jeanne Rugles, will contact new and past volunteers to schedule a time and place for you, as well as to inform you about dates for the training program.

I hope you will call us today and express your interest in becoming a "Flowering of Denver" volunteer. The time you spend aiding the Gardens in this annual event may become part of your own personal gardening tradition.

Rob Proctor
1989 Chairman of
"The Flowering of Denver"



Gardening is on the rise, no doubt about it. Looking back on last summer, I recall a more beautiful city—more flowers, more color—somehow friendlier as a result. I'd like to think the influence of Denver Botanic Gardens is largely responsible. "The Flowering of Denver" Plant and Used Book Sale, this year on May 12-13, focuses our attention on the possibilities for each year.

I applaud any horticultural effort, and there were some to cheer about last summer. I saw an apartment building with bright flowers spilling through the iron railings on each balcony, an effect unrivaled since Babylon. There's a beautiful little red brick church on Speer that featured gaily planted tubs and pots in every nook and cranny. Each time I passed, I could feel the joy and love apparent in the colorful display. To every resident, shopkeeper and park employee who planted flowers last year, let me say "thank you" for making this a more beautiful city. (On the other hand, since I have my reputation as a cantankerous old grouse to consider, let me urge the people who live on some of the well-traveled thoroughfares of our city to get with the program. I'm going to boycott your streets until those endless miles of lawns are enlivened with a little color.)

I fear that my suggestions (alright, call them pronouncements) on color combinations are sometimes misunderstood. I have few prejudices against color, only its use. I love pure strong color, and I can't imagine a gardener who, if pressed, won't admit a passion for at least one gaudy hue. So let's get it all out in the open. While my sensibilities and experience may tell me to plant a subtle grouping of pale pink anemones and gray santolina, inside I have a devil who insists on big red dahlias and orange lilies. He will probably lose that battle, but the war rages on. I will face the same conflict when the plant sale rolls around, and I fully intend to listen to my devil.

I asked some of the division chairmen of this year's sale to come up with their most richly colored selections.

Starting at the top, the 1989 chairman, Rob Proctor, plugged his personal favorites. *Zauschneria californica*, California fuchsia, bursts into bloom late in the season with intense scarlet tubular flowers. He also favors *Zinnia angustifolia*, classic zinnia, with Day-Glo orange rays down the center of each golden petal, and *Lychnis coronaria*, rose campion, with a summer-long profusion of small, shocking magenta blooms.

Betty Lou Roberts indicated she found it difficult to select roses that

weren't show-stoppers. In a division that embraces a wide spectrum of glorious color, she chose the climbers 'Blaze' (red) and 'Joseph's Coat' (multi-colored red-orange and yellow). The knockout hybrid teas and floribundas include 'Trumpeter' (bright orange), 'Razzle Dazzle' (shining gold—what else?), 'Touch of Class' (coral and cream), 'Color Magic' (hot pink), 'Olympiad' (shocking red), 'Olé' (fiery orange-red), 'First Prize' (brilliant pink), and 'Ink Spots' (deep, intense red).

John Reber, in perennials, approached my question on a seasonal basis. His favorites for spring are *Papaver nudicaule*, Iceland poppies, whose orange, yellow and crimson blossoms are excellent choices for foothill gardens, and peonies, of which he sells both classic and new varieties. For summer color he likes multi-colored *Helianthemum nummularium*, sun roses, and scarlet *Penstemon pinifolius*. Both are good subjects for sunny, dry areas. For late summer and fall, knock 'em dead with our native *Liatris punctata*, purple gay-feather.

flowers known to man, let me tell you that if you take them all home and plant them together you will have a disaster of epic proportions. But I do have a solution, stolen from one of the best gardens in the city. You will recognize the garden, tended by a lady of exquisite taste, if you have been lucky enough to see it. It is largely a garden of white—banks of white petunias, clumps of daisies, billows of babies breath. Don't misunderstand. It is the most colorful of gardens, for the masses of white intensify the richly colored flowers interspersed throughout.

The experience is breathtaking. Imagine deep sweeping beds set back from the terrace by a short expanse of green lawn. Each bed is dissected by a short brick wall, enclosing the patio and promising new vistas on the other side. The colors are intoxicating with brilliant orange daylilies and calendulas, contrasted by deep violet larkspurs and clematis. Lemon yellow achilleas play off blue veronicas, delphiniums and pansies. Ruby roses and feathery pink filipendulas glow like stained glass. The key, I'm sure, is the masterful use of white. There is



The folks over in herbs aren't quite as demure as one might imagine. Their chairman, Lori Most, pointed out the flamboyant floral displays of scarlet pineapple sage, cherry red monarda and leonotis or lion's ear. The last one is a little-known plant from Southern Africa that packs a big wallop. Late in the season, whorls of buds appear in tiers on four-foot stems. The tubular flowers are most curious—each appears to be made of orange felt. I grew leonotis for the first time last year, and it was a handsome jolt of color. Lori recommends it for the herb garden or any sunny flower bed.

Having whetted your appetite for some of the most intensely colored

a bit of debate among garden writers about it: Some claim white mutes but others claim it amplifies. I take my cue from a lady who certainly knows color—white amplifies.

After you fill your cart at "The Flowering of Denver" with the most devilishly bright blooms, go back and get more. Fill it to the brim with white.

(Emerson R. Birchfield is our special correspondent for "The Flowering of Denver." He may be spotted at the sale, driving off with a pickup load of white flowers, to counteract a garden that he claims, last year, "looked like Baghdad in flames.")

Watch for full carts at the Plant and Used Book Sale. (If there are a lot of white plants it may be Emerson's cart.)





Winter
1989
Denver Botanic Gardens

CLASSES

Rocky Mountain Residential Xeriscape

(six sessions)

Section I: Thursdays, Feb. 9, 16, 23, March 2, 9, 16

Section II: Wednesdays, March 22, 29, April 5, 12, 19, 26

7 to 9 p.m. Classroom B

Please indicate your section on the registration form.

Learn how to plan the ideal Rocky Mountain landscape. A private yard can provide recreation, privacy, food production and beauty while requiring surprisingly little water and maintenance.

After several slide programs on sensible landscape design and appropriate plant materials, students will analyze their own sites and begin to develop a personal plan. The major emphasis will be on skills for "do-it-yourself" site planning and planting design.

Specific topics will include sketching from slides and drawing plans; selecting plants; estimating water consumption and bills; starting from scratch and reworking existing landscapes; attracting and controlling wildlife; edible xeriscape; and xeriscape for all seasons.

Instructor: Jim Knopf is a landscape architect who has designed many local residential landscapes with low-water demand plants. He is the author of *Edible & Useful Wildplants of the Urban West* and has extensive teaching experience.

Fee: \$48 members/\$53 non-members

Limit: 12

Beginning Bonsai

(four sessions)

Thursdays, February 16, 23, (skip March 2), March 9, 16

7 to 9 p.m.

DBG's Morrison Center

This introductory course will cover the history and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of bonsai will be included.

Each student will take a completed bonsai home and all materials will be provided.

Instructors: Keith Jeppson, past president of the Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 16 years. Harold Sasaki is a commercial bonsai grower with 18 years of experience. Both are lively, capable teachers with much experience.

Fee: \$54 members/\$59 non-members (includes \$22 for materials)

Limit: 16

Garden Design: An Artist's Approach

(four sessions)

Tuesdays, February 21, 28, March 7, 14

7 to 9 p.m.

Classroom C

Gardening is more than finding the right spot for the right plant. How plants relate to one another in the garden, and the effects that can be achieved with color, form and texture will be explored.

The focus of this course is the artistic aspect of gardening, with each segment addressing a specific topic in garden design.

Tuesday, February 21
"Color in the Garden"

The use of color is a personal expression, and it can produce serene or explosive effects. Color combinations can be either subtle or daring. Classic color schemes and some unusual ones will be presented, as well as the flowers that create contrast or harmony.

Tuesday, February 28
"Combining Annuals and Perennials"

Traditional perennial gardening often excludes annual flowers. This is a shame since annuals can be a real asset to the herbaceous border. This session will describe how to incorporate them into perennial plantings to contrast, unify or accent. Tall, medium and short varieties will be featured to supplement existing plantings and as star performers themselves.

Tuesday, March 7
"Color in the Shade"

Nothing is as worrisome to the gardener as a shady bed. The choices for deep shade are somewhat limited, but through the use of annuals, perennials, bulbs and containers, the creative gardener can achieve lovely results. The partially shaded garden has huge potential for glorious color and there is a wealth of plants well suited to Denver.

Tuesday, March 14
"A Season of Bloom"

The goal of every gardener is to enjoy flowers throughout the growing season. Too many gardens peak in early summer. This session will concentrate on how to achieve maximum color from spring to frost, and beyond. Perennials with extended blooming periods and varieties for late summer and autumn flowers will be covered.

Instructor: Rob Proctor creates art in his garden and art from his garden. His botanic drawings hang in the Smithsonian Institution as well as in collections throughout the world. Rob draws his inspiration from his award-winning garden, which will be fea-



tured in an upcoming issue of *Fine Gardening*.

Fee: \$32 members/\$35 non-members

Denver Street-Side Structures

(one session)

Monday, February 27

7 to 8:30 p.m.

Classroom C

Take a visual stroll through the history of our Denver streets noting common themes and unique details that have developed over time and helped shape our landscapes. "Denver Street-Side Structures" is a slide program featuring patterns of paving, walls, fences and gates found in old Denver residential neighborhoods. The details range in character from sophisticated to primitive and from conservative to unconventional.

Instructor: Kathy Hamilton is a local landscape architect and a great fan of these street-side gifts to our community.

Fee: \$6 members/\$6.50 non-members



Basic Beekeeping

(two sessions)

Mondays, Feb. 27, March 6

7 to 9 p.m.

DBG's Morrison Center

This two-session class is designed to show the beginner how to get started in beekeeping. Through a step-by-step approach with lectures and hands-on demonstrations, students will learn the entire procedure from set-up to honey harvest.

A discussion of interesting facts about honey plants, bee behavior and ecology will also be included.

Instructor: DBG Community Gardens Coordinator Carol Dawson has kept bees for five years.

Fee: \$16 members/\$17.50 non-members

The Four-Season Rock Garden

(four sessions)

Mondays, March 6, 13, 20, 27

7 to 9 p.m.

Classroom C

Everybody loves a rock garden in the spring. After a long, cold winter, nothing gives more pleasure than those first tiny bulbs and showy, early mats of color. The most successful rock gardens, however, are planned for flowering at all seasons. Even when not in bloom, a proper selection of rock plants will have interesting foliage, textures and colors.

This class is organized to provide the homeowner with the information needed to create a truly year-round garden.

Learn which plants produce waves of blossoms in the spring and maximize their effect. Find out which summer-blooming rock alpine plants from Asia, the southwestern United States and South Africa have tested successfully in our Rock Alpine Garden. Discover which rock plants, from asters to zauchnerias, bask in the balmy days and cool nights of autumn. Plan for winter interest with dwarf conifers and tough plants that will actually flower when the weather is mild.

Instructor: Panayoti Kelaidis is curator of our award-winning Rock Alpine Garden as well as an enthusiastic teacher who enjoys sharing discoveries gleaned from his eight years at Denver Botanic Gardens.

Fee: \$32 members/\$35.50 non-members

Native Colorado Conifers and their Natural History

(two sessions)

Wednesdays, March 8, 15

6 to 8 p.m.

DBG's Morrison Center at 11th and York Streets, Denver

Can you distinguish a one-seeded juniper from a Utah juniper? Learn how to correctly identify Colorado's native junipers, pines, spruces and firs from characteristics such as cones, needles and bark.

Look at cross sections and fresh branches and discuss annual rings. Specific plants, animals, climate and soil associated with our evergreens will all be covered.

Bring note-taking materials and a hand-lens, if you have one.

Instructor: Tina Jones, popular field trip leader and naturalist, studied alpine ecosystems at the University of Colorado, Boulder, Research Center outside of Ward, Colorado.

Fee: \$16 members/\$17.50 non-members

Watercolor Painting

(five sessions)

Wednesdays, February 15, 22,

March 1, 8, 15

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Classroom B

Please indicate your section on the registration form.

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: 1½-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$60 members/\$66 non-members

Limit: 12



*Facing page:
Learn about an
artist's ap-
proach to gar-
dening in the
"Garden De-
sign" class.
Photo by Rob
Proctor.*

*This page:
Eggs for your
Easter tree.
(These have
been designed
by instructor
Rob Proctor.)*

Watercolor Eggs

(two sessions)

Saturdays, March 18, 25

1 to 3 p.m.

Classroom B

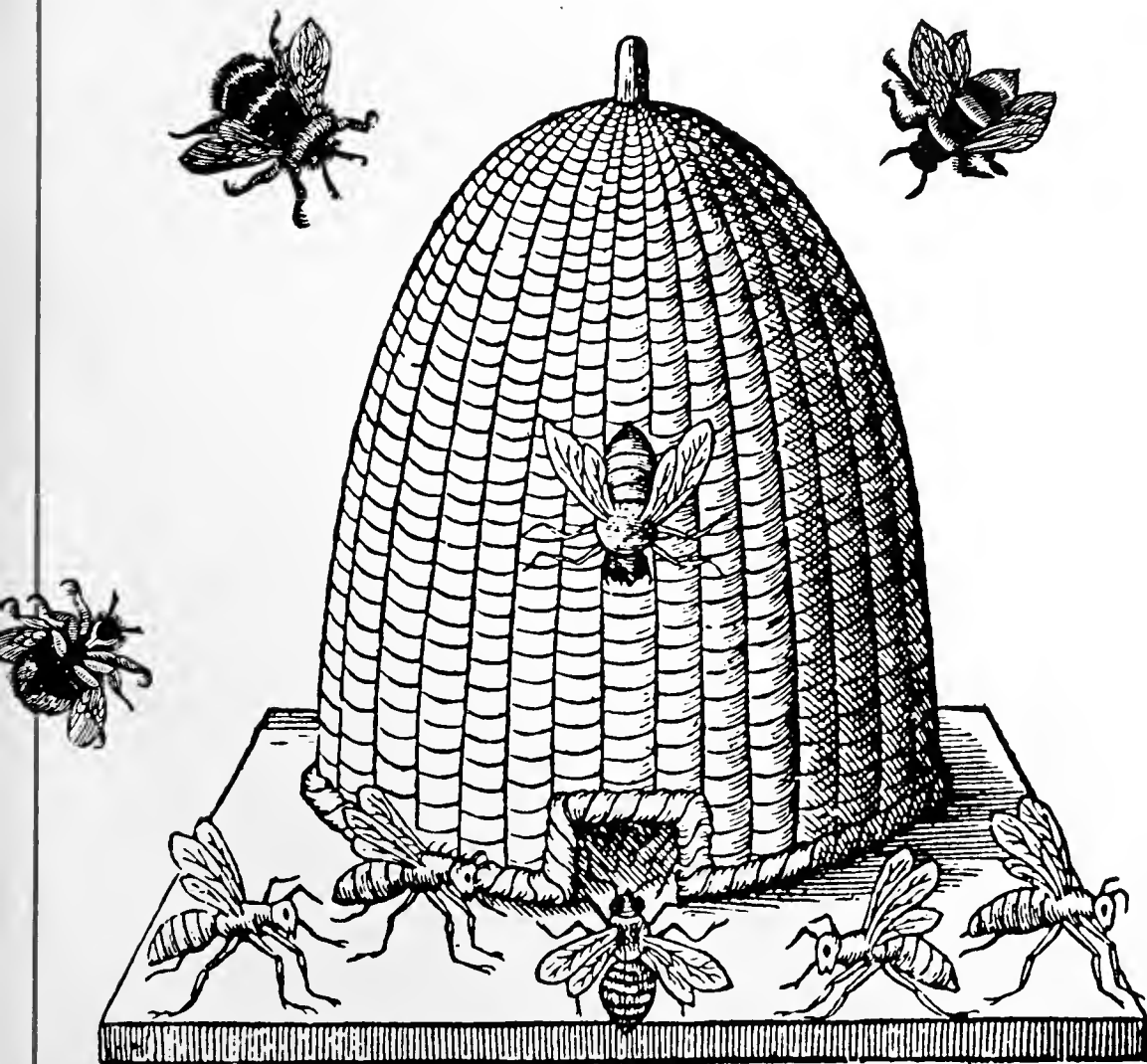
If you have a bit of patience and a steady hand, you can learn to create fanciful decorations for the Easter season. With step-by-step instruction, turn a humble uncooked egg into a jewel-like creation. Hang your fanciful eggs on a bare branch to make an Easter tree.

Please bring several uncooked eggs, a bowl, a large needle, watercolors, acrylics or fine markers and a number one watercolor brush to class.

Instructor: Rob Proctor is an artist and author who gets eggstravagant during the holidays.

Fee: \$26 members/\$29 non-members (includes \$10 for materials)

Limit: 15



Victorian Extravaganza

Old Roses for Modern Gardens

(two sessions)

Wednesdays, February 1, 8
7 to 9 p.m. Classroom A

Roses have been the focus of gardens from antiquity to the present day and the interest in their development has a colorful documentation fascinating to history buffs. These Old Garden Roses are still available, a pleasure in any landscaping and indispensable to the old house-garden restorer.

The Victorian Era saw the institution of the still famous gardens of Europe containing Gallicas, Damasks, Bourbons, Mosses et al. This course will cover rose evolution and relationships, landscape use, growing, exhibiting and sources and a complimentary Old Garden Rose for each participant.

Instructor: Dr. William Campbell is a surgeon long-devoted to rose growing and has taken a historian's interest in roses to the ownership of a major specialty nursery since 1971. He is active with the rose societies of Colorado and is on the American Rose Society's Old Garden Rose Committee.

Fee: \$16 members/\$17.50 non-members

Planting a Peter Rabbit Garden

(three sessions)

Tuesdays, February 7, 14, 21
7 to 9 p.m.

DBG's Morrison Center

Get a jump on spring and find out how to grow carrots, peas, lettuce, cabbages and other vegetables just like Mr. McGregor. Learn how to plan and plant an urban vegetable garden using small space techniques such as wide row spacing, successive planting and intercropping. You'll be able to grow more produce in your city garden than you ever thought possible!

In addition, non-chemical ap-



proaches to soil improvement and fertilizing as well as pest control will be covered. Sources of appropriate plant varieties will also be included.

Instructor: An avid horticulturist and teacher, Carol Dawson has worked on the DBG staff in the Community Gardening Program for the past two years.

Fee: \$24 members/\$26.50 non-members

Victorian Posies: Make a Nosegay for Somebody You Love

(one session especially for men)

Monday, February 13
7 to 9 p.m. Classroom B

If Phil Donohue or Alan Alda knew about this class, they'd be sure to attend. Real men aren't afraid of showing their feelings on Valentine Day: Don't be intimidated. Create a charming expression of your love for your sweetheart. All materials and flowers plus LOTS of help will be provided.

Instructors: Angela Overy and Rob Proctor

Fee: \$23 members/\$26.50 non-members (includes a \$15 materials fee)

Victorian Posies: Make a Nosegay for Somebody You Love

(one session)

Monday, February 13
1 to 3 p.m. Classroom B

In this workshop students will create a vintage-looking "tussie-mussie" to take home with appropriate Victorian valentine flowers, ribbon and lace. A loving reception is guaranteed!

Instructors: Angela Overy and Rob Proctor

Fee: \$23 members/\$26.50 non-members (includes a \$15 materials fee)

The Secret Garden

(one session)

Section I: Sunday, February 5
Section II: Saturday, February 11
2 to 3:30 p.m. Classroom C

Please indicate your section on the registration form.

The film *The Secret Garden* can be enjoyed at the Gardens in conjunction with the Smithsonian Institution exhibit, "Victorian Gardens: A Horticultural Extravaganza."

This 1949 film stars Margaret O'Brien as a young girl who moves to a run-down Victorian estate and devotes herself to an abandoned garden that she discovers. It is a classic that should be shared by the entire family.

Reservations can be obtained by returning the registration form in this newsletter. Please send a stamped, self-addressed envelope to the Gardens along with your check and registration form, by January 30 for the first section and February 3 for the second section, and your tickets will be returned immediately. If space is available, tickets will be sold at the door. (See article in this newsletter for more complete information.)

Fee: \$3 adults/\$1.50 children six through 15 years old

For additional information: Call 331-4000, extension 20

Denver Botanic Gardens

909 York Street

Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

American Garden Writing

Edited by Bonnie Marranca. PAJ Publications, New York, 1988. \$23.95. SB 451.3.A5 1988

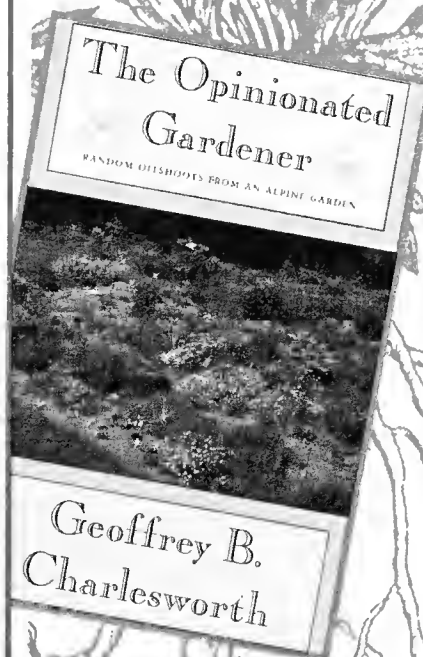
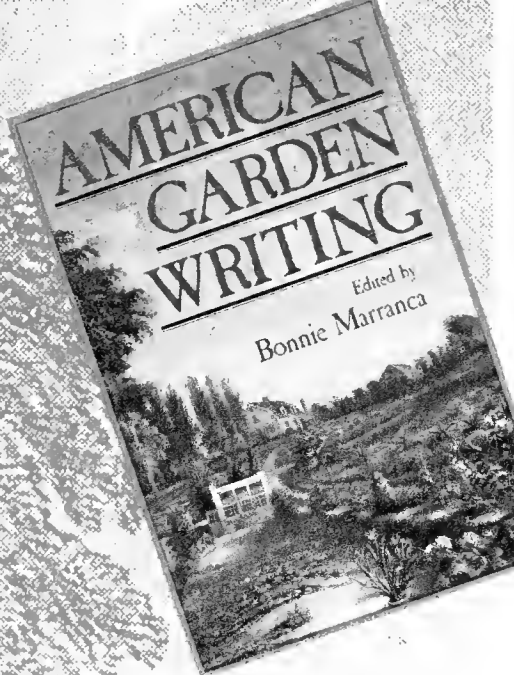
One of the best spin-offs of the current enthusiasm for gardening is the promotion of American garden writing, past and present. If you read only one gardening book this year, it should be this fascinating anthology. But this book leads to others, on topics ranging from garden restoration to the role of women in the history of gardening to pollination biology, by diverse authors from two centuries.

This book makes accessible the accounts of early plant hunters, and through them, gives us a clear vision of an unspoiled continent. We see a flora through the eyes of acquisitive horticulturalists, so even a modern gardener can conjure up a detailed picture of scenery that is now filled with office parks and condominiums. The same holds for Frederick Law Olmstead's description of Panama in the chapter "Inspiration from Tropical Scenery for Park Planting." Mr. Olmstead tries to find an equivalent temperate species for every tropical one to design a pseudo-tropical forest in the Northeast. Odd as this sounds, we do the same when we try to find drought-tolerant, hardy plants, that evoke a New England landscape.

Although this is not a how-to book, I did find myself sufficiently inspired by pages from Thomas Jefferson's "Notes from a Garden Book" to plant seeds of wild clematis just as he did on April 27, 1807. As I did so, I felt part of a long-standing and noble tradition, even though my humble motive was to hide an unsightly foundation.

The fact that once again the Rocky Mountain gardener is neglected was forcefully brought home to me by the account of Amos Pettingill's founding of White Flower Farm, the posh nursery in Connecticut whose catalog has been favorite garden reading for years. When I acquired my first garden in New York, I made a pilgrimage to the renowned nursery but found myself so intimidated by the flossy professionalism of both staff and customers (not to mention the prices), that I left empty-handed. I was astonished to read that the sage of White Flower Farm, so dubbed by Katherine White, did his first gardening on his aunt's ranch east of Boulder! This is the only mention of gardening on our turf in an otherwise excellent book.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder



The Opinionated Gardener

By Geoffrey B. Charlesworth. David R. Godine, Publisher, Inc., Boston, 1988. \$16.95. SB 459 C4 1988

Geoffrey Charlesworth is a retired professor of mathematics who gardens four acres of sparkling alpine plants in southwestern Massachusetts. His book is a collection of essays that began as contributions to the *Bulletin of the American Rock Garden Society*.

Mr. Charlesworth is probably a very good writer who happens to garden, although I imagine he would say he is a very good gardener who happens to write. Either way, we are the winners, for *The Opinionated Gardener* is a charming, witty, informative book that is sure to touch each reader in some unusual way.

Most of the essays are two or three pages in length, complete within themselves; this makes it a dandy bedside book. I truly enjoyed the entire book but I was particularly taken with the endeavor "February Madness and Tool Buying." It is delightful reading about the crazy things gardeners do while waiting for spring. "Two Gardeners" is a six-page article about the war that goes on within each gardener. I found it to be extremely funny and so . . . so . . . true!

I loved the essay "Phyllotaxis" where Mr. Charlesworth calls upon his mathematical background to dazzle us with "infinite sequences" (mathematical series) as applied to the arrangement of leaves upon various plants. Finally, I thought his piece about botanical Latin titled "Rock-Garden Latin" did much to simplify a subject mind-boggling to the average gardener.

Mr. Charlesworth writes in an informal style, which is easy to read; yet his marvelous vocabulary and artistic selection and placement of words reveal the depth of his writing skills. I await more, for with this effort Mr. Charlesworth has demonstrated that garden writers can be witty and literate.

The Opinionated Gardener is also available in the Gift Shop.

Bob Heapes
Photographer, historian, lecturer and avid rock gardener.
President, Rocky Mountain Chapter
American Rock Garden Society

LIBRARY JOURNALS

Helen Fowler Library
Volume 12, No. 1
February 1989
Librarian:
Solange Gignac



Emerald Mitchell is one of the many helpful volunteers in the library.



The beginning of the year is a good time to review services offered by the Helen Fowler Library. While reviewing familiar procedures patrons can discover recent innovations. Library hours are 10:00 a.m. to 4:00 p.m. Mondays through Saturdays.

The Helen Fowler Library traces its origin to Helen Fowler who donated her collection of books to the Colorado Forestry and Horticulture Association in 1947. After the merger of CFHA with Denver Botanic Gardens, the library was housed at Denver Botanic Gardens House until the Education Building was finished in 1971. The 3,000 books, plus periodicals and pamphlets, were moved in February of that year to the present facility. The book collection now exceeds 16,500 volumes, over 380 periodical titles, hundreds of seed and nursery catalogs and several thousand pamphlets.



Services provided by the library include participation in interlibrary loans. If a patron wants a book or journal article that the library does not own, it can be borrowed from another library that does own the desired materials. The Helen Fowler Library has lists of periodicals owned by the University of Colorado, Colorado State University, Denver University, Brigham Young University and the University of Arizona. These are provided to us on microfiche that are

frequently updated. The Colorado materials are made available by access to CARL (Colorado Alliance of Research Libraries) by means of a personal computer and a modem that the library hopes to have soon.



In 1987, 90 requests were made to other libraries from HFL and in 1988, 171 requests were submitted. The requests are usually filled within a couple of weeks. The turnaround time is quick because HFL belongs to the Central Colorado Library System, a public agency that "provides behind-the-scenes help and encourages cooperation so that Colorado residents may receive the best possible service from libraries of all types." CCLS provides us twice-a-week pickup and delivery service in the metropolitan area and connects with two other library courier systems, providing delivery of books and materials as far as Wyoming to the north and Colorado Springs to the south.



Patrons can return HFL books to any public library in the greater metropolitan area and these will be delivered to HFL every Tuesday and Thursday. Books belonging to other libraries in the system can be deposited at HFL for return to the library from which they were borrowed.

At these delivery times, the courier will pick up whatever materials the library is sending to other participating libraries within the geographically defined area. The CCLS also provides subject searches and other supplementary verification and location services using the state's broadest and most comprehensive library collection, at University of Colorado, Boulder.



Helen Fowler Library books are borrowed for a period of three weeks and may be renewed by phone for additional, reasonable periods if no one is requesting them. In special cases extended loans have been arranged. Periodicals, nursery and seed catalogs do not circulate. The Waring Room Rare Book collection is also restricted to in-house use. The presence of a copier in the library has eased the difficulties of copying non-circulating materials.

The current seed and nursery catalogs are placed on the eastern window ledge. A list of catalogs received during the past week is displayed on a book stand. The catalogs are filed in alphabetical order by name of company. The library keeps cross-reference files of specialties of companies. If you require this type of information, please ask the librarian.

Information concerning classes, both local and national, as well as conferences, symposia and exhibits is kept in a folder labeled "items of interest."



The library collects books for the annual book sale on a year-round, ongoing basis. Foreign stamps are also desired. Books, stamps and some periodicals (art, cooking, travel, decorating and craft magazines) are sold at the annual Plant and Used Book Sale, the weekend of Mother's Day. This income has been the major source of funds for the acquisition of books for over 15 years. Donations may be brought to the library at the donor's convenience or a pickup service can be provided if sufficient number of boxes are to be given.



The purpose of the library is to provide botanical and horticultural information to the staff, members of the Gardens and to the public. If you have any questions on services provided by the library or need information on donating to the book sale, call Librarian Solange Gignac, at 331-4000, extension 32.

Eight years after the word "xeriscape" was first coined it remains, unfortunately, misunderstood and often misused. From time to time it is treated, even by a few garden writers who are published in local newspapers, with distrust.

Since it is becoming, across the continent, the generally accepted label for water-wise gardening, xeriscaping needs to be understood and the misconceptions and prejudices about it laid to rest.

Much of the problem, it seems, is an inability to look beyond the word itself; its choice has contributed to the misunderstanding. It was created in 1981 by the Denver Water Department from two different roots. One is *xeros*, a Greek word meaning "dry" but which carries in modern Greek the connotation of "crisped" or "parched." The other is "scape," a word meaning "scene." Is it any wonder that it conjures in the minds of many who hear it for the first time a picture of its literal translation, a "dry scene?"

Most of us don't feel comfortable envisioning "dry" around our homes. To gardeners used to pouring on great amounts of water to keep their bluegrass lawns from looking parched, to designers schooled in creating lush oases in the fashion of Eastern antecedents and to owners of property who are concerned about its value—for personal enjoyment or market appreciation—the scene conjured is, therefore, not usually an attractive one.

Once we look behind the novel marketing brand name and examine the principles for which it stands, xeriscaping has a far friendlier, more beautiful and slightly more traditional image than one might imagine. The word was coined to help market a set of landscaping and gardening principles. It is a trademark of the National Xeriscape Council, an alliance of organizations from New Jersey to California that promotes water conservation through the application of certain practices of landscape design and horticulture. The first of these groups was the Front Range Xeriscape Taskforce (now called Xeriscape Colorado); it and the Denver Water Department remain leaders in the movement.

Xeriscaping emphasizes six basic directions for creating and maintaining beautiful, enjoyable landscapes that use less water. They realize other economies as well, in maintenance labor and in expense. Consider the following fundamentals.

Plan carefully and design creatively. By grouping your plantings by their water requirements so that individual parts of your yard can be

watered only when they absolutely need it, you can save amazing amounts of water over the years. Whether you make the final design yourself or hire a professional, your planning ahead will ensure a more beautiful, economical and useful homesite.

Reduce turf areas. Kentucky bluegrass is one of the most water-greedy plants we currently use, and we use it in vast swaths. Use it only where its particular qualities are absolutely necessary. By cutting down the size of your lawn you can begin counting your water savings the first year.

Improve your soil. Adding the correct organic matter helps your soil more efficiently retain and dispense what precious little water it receives. Increasing your soil's ability to hold both water and oxygen will promote the growth of healthier root systems better able to forego frequent applications of water.

Irrigate well, but sparingly. This is made easy by zoned plantings. A zoned irrigation system helps even more.

Use mulches. Among researchers there is a great deal of disagreement over many of the beneficial qualities often attributed to mulches. However, there's little doubt about one thing: Most mulching materials prevent loss of water through evaporation.

The principles outlined above are not proprietary to xeriscaping, but the xeriscape movement is a valuable concept to embrace. And because it has become the definitive label for the practices that we must choose in order to landscape and garden wisely in this relatively dry part of the world, you should find an examination of the principles beneficial.

Saving water, work and wealth will follow.

Down the Garden Paths in February

This is a good month to visit the mountains of the world—indoors—to catch a glimpse of spring coming on early. The Rock Alpine House in the far southwest corner of the Gardens is brimming with semi-hardy bulbs and alpine plants blooming ahead of the season.

The Gardens' collection contains plants from mountainous regions around the globe. Many of these plants, because they originate close to the equator, are not winter hardy in our northern continental climate. Here they must be protected in cold frames during our harshest weather and moved into the Rock Alpine House for display. In the dead of winter they offer a welcome springtime scene.



Walk down the garden paths to the Rock Alpine House in the far southwest corner to find a collection of unusual plants.

Use plants that use less water. This is the most pleasant guideline of all because you can choose the beautiful, unthirsty plants for your yard from a list of thousands of possibilities. The most important choice is of a turf grass that uses less water than bluegrass does.

Practice suitable horticulture. Your redesigned landscape, though less demanding of your time, will still need some attention. Good gardening practices, especially wise watering, will extend your savings.

While you're admiring the blossoms take time to appreciate the educational display on the north wall. It is one of many that have been created by volunteer Evelyn Murrow. These displays are changed regularly to offer our visitors ever-fresh views into the lives of alpine plants and their habitats and into rock gardening, the fascinating horticulture that originated to celebrate them.

Larry Latta
Botanist-Horticulturist
Denver Botanic Gardens

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Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switch-board during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

**First meeting of a class with more than one session*

5
The Secret Garden

12

19

26

6

13
Victorian Posies: Make a Nosegay for Somebody You Love

20

27
Basic Beekeeping*, Denver Street-Side Structures

7
Planting a Peter Rabbit Garden*

14

21
Garden Design: An Artist's Approach*

28

1
Chair Caning*, Old Roses for Modern Gardens*

8

15
Watercolor Painting*

22
Annual Dinner

March 25-26
Spring Gesneriad Show and Sale

2

9
Rocky Mountain Residential Xeriscape*

16
Beginning Bonsai*

23

3
February 3-12 Garden and Home Show

10

17

24

4

11
The Secret Garden

18

25

Coming Next Month

March 6-7
Groundwater Symposium
March 6
The Four-Season Garden*

March 14
Bonfils-Stanton Lecture Series begins

March 18-19
Cactus and Succulent Show and Sale

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE
February 1989



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From the Metropolitan Museum of Art to You— Chris Giftos

Chris Giftos, floral designer and special-events arranger for the Metropolitan Museum of Art in New York, will share his wit and experience Tuesday evening, March 14, in the first Bonfils-Stanton Lecture scheduled for the 1989 series.

As the museum's floral master, Mr. Giftos is responsible for the grand-scale arrangements that greet visitors at the impressive museum entrance. He will treat his Denver Botanic Gardens' audience to a similar creation in his demonstrations the night of the 14th.

Mr. Giftos' work at the museum is underwritten by a patron who feels that the still, silent works that fill the museum's halls need the life and grace of flowers to lend balance to the spirits of those who come to view the art.

His weekly flower arrangements have earned him a following nearly as devoted as that which scrutinizes the masters within the building. In fact, many visitors come just to see (and critique) his floral creations.

Because of this flair for arranging, he also coordinates the settings for special, often elegant, happenings at the museum: dinners, cocktail parties and other social events visited by the city's most exalted cultural patrons. From the candles, flowers and cloths to the dishes and chairs, these events bear

Green Thumb

NEWS

Denver Botanic Gardens March 1989

Number 89-3

the mark of Mr. Giftos' exciting taste and sure choice.

His influence reaches far beyond the lion-guarded entrance of his home museum. He lectures and demonstrates floral techniques and gives instruction on events planning from coast to coast.

For his talk at the Gardens Mr. Giftos has planned a brief slide-assisted "tour" of the Metropolitan Museum of Art, featuring examples of his efforts there. Then he will do a "great hall" arrangement in a special, large, two-tier container that he uses at the museum. His lecture will continue with several demonstration arrange-

ments of floral accompaniments for special dinner parties. It will be an evening of floral fantasy for amateur and professional flower arrangers and party decorators, as well as for those of us who simply enjoy watching (and listening to) a highly creative artist at work.

Mr. Giftos' inventions rely on flowers flown in specially from Holland. In Denver he will also use for his larger works—weather permitting—branches chosen from flowering shrubs in the Gardens.

The ability of Denver Botanic
continued on page 6

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Guides
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and Used
Book Sale
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*Emerson R.
Birchfield
page 5*

*Bonfils-
Stanton
Lecture Series
Registration
page 6*



*Master Flower
Arranger Chris
Giftos will open
the 1989 Bonfils-
Stanton Lecture
Series on Tues-
day, March 14.*

Down the Garden Paths in March

If you haven't ordered your flower and vegetable seeds yet, time is running out, and your stroll down the paths of Denver Botanic Gardens this month should lead you to the Gardens' Helen Fowler Library. There you'll find hundreds of seed and nursery catalogs to help you locate any plant you may have imagined for your garden.

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Do you want more fresh salads this year? The Cook's Garden specializes in leafy vegetables, many commonly known in Europe and the Orient.

Try to "always buy Colorado." Don't overlook the catalogs by local nurseries, including Rocky Mountain Seed Company, Little Valley Nurseries, James Nursery, Old Farm Nursery, Green Acres and Center Greenhouse. These can give you a good idea of what to look for before you go.

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Watch for signs of spring near the garden paths.

Tributes

In memory of Maggie Boltz

John & Mary Moore

In memory of Mrs. William (Ellen) Embree

Mr. & Mrs. Ira E. Tanner, Jr.

In memory of Ruth Patton Hubner

Mr. & Mrs. John F. Falkenberg
Marilyn Girouard

In memory of Mrs. Mary Jimerson

Mr. & Mrs. James Logan

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Rose Symposium "The Basics of Growing Roses"

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According to society president Geraldine Boller, the rose subjects to

be addressed by experienced growers from around the state will be planting, fertilizing, arranging and the best cultivars for showing. A question and answer period will follow.

The Morrison Center is located on 11th Avenue between Josephine and York Streets. The symposium will begin at 9:00 a.m. For information call chairmen Merl and Opal Doane, 781-6882.

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Shirley S. Sargent

Mr. & Mrs. Fletcher Thomas

Mr. & Mrs. Thomas G. Vessels

Tim & Tina Vessels

Robert & Patricia Welch

In memory of Florence C. Miller

Lisa E. Davis

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Les Eller

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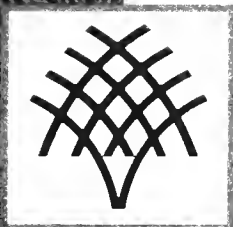
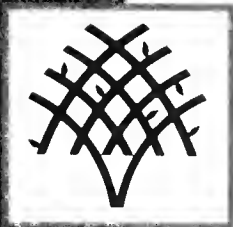
DENVER BOTANIC GARDENS

1989

THROUGH

THE

SEASONS



1005 YORK STREET

DENVER, COLORADO 80206

(303) 331-4000

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March

- 6, 7 Colorado Federation of Garden Clubs and Denver Botanic Gardens Groundwater Symposium
- 14 Bontils-Stanton Lecture "Flowers from the Met" — Chris Gittos
- 18, 19 Colorado Cactus and Succulent Society Succulent Show & Sale
- 25, 26 Rocky Mountain African Violet Council Spring African Violet Show & Sale

April

- 1, 2 Denver Rose Society Rose Symposium
- 11 Bontils-Stanton Lecture "Rare Books and Unusual People" — Ian MacPhail
- 18 A Day of Discovery: Desert Plants

May

- 11 "The Flowering of Denver" Pre-Sale Party
- 12, 13 Denver Botanic Gardens Annual Plant and Used Book Sale
- 16 A Day of Discovery Rock Gardening
- 20, 21 Ikebana International Flower Show

Lobby Display April, May, June — "Plants of the Desert"

June

- 28, 29 Denver Rose Society Old Garden Roses Workshop and Show
- 29 Memorial Day Holiday Gardens open
- 3, 4 American Iris Society Iris Show & Sale
- 11 Colorado Water Garden Society Tropical Water Lily & Aquatic Plants Sale
- 14 Extended Evening Hours Activities "Japanese Festival"
- 17, 18 Rocky Mountain Bonsai Society Bonsai Exhibition
- 20 A Day of Discovery Japanese Horticultural Arts
- 20 Young Audiences Concert
- 22, 23 Garden Concert
- 24 Denver Botanic Gardens Guild Terrace and Garden Tour
- 27 Young Audiences Concert

July

- 1-5 Colorado Watercolor Society Watercolor Exhibit
- 4 Fourth of July Holiday Gardens open
- 6, 7 Garden Concert
- 8 American Iris Society Rhizome Sale
- 11 Young Audiences Concert

Lobby Display July, August — "Tropical Plants"

- 12 Extended Evening Hours Activity: "The Colorado Scene"
- 15, 16 Colorado Native Plant Society Workshop
- 18 A Day of Discovery The New Colorado Horticulture
- 20, 21 Garden Concert
- 25 Young Audiences Concert
- 29, 30 American Hemerocallis Society Daylily Exhibit & Sale

August

- 2-13 Colorado Glass Artists Fellowship: "Glass at the Gardens"
- 3, 4 Garden Concert
- 9 Extended Evening Hours Activity "Art in the Gardens"
- 15 A Day of Discovery Botanical Photography
- 17, 18 Garden Concert
- 20 Colorado Mycological Society Mushroom Fair
- 24-25 Denver Artists Guild: Art Show & Sale
- 31, Sept. 1 Garden Concert

September

- 2 Men's Garden Club of Denver Plant and Produce Sale

Lobby Display September, October — "Evolution of the Plant Kingdom"

- 4 Labor Day Holiday Gardens open
- 12 Bontils-Stanton Lecture "Perennial Combinations" — Frederick McGourty
- 19 A Day of Discovery Peppers — Sweet to Spicy!
- 21-24 Denver Allied Arts Exhibit

October

- 1 Rocky Mountain Chapter American Rock Garden Society Lecture by Brian Mathew
- 10 Bontils-Stanton Lecture "Monet's Giverny: A Painter's Garden" — Mary Tonelli Dorra
- 14 Rocky Mountain African Violet Council Fall African Violet Sale
- 28 A Day of Discovery The Complete Pumpkin

November

- 1 Carl Tempel Wildflower Lecture
- 3-5 "Botanical Treasures IV" — Botanical Print Show and Sale
- 14 Bontils-Stanton Lecture "The New American Style of Garden Design" — James van Sweden
- 10 Veterans' Day Holiday Gardens open

Lobby Display November, December — "Holidays Around the World"

- 11, 12 Gloxinia Gesneriad Growers Gesneriad Show & Sale
- 17, 18 Denver Botanic Gardens Holiday Sale
- 21 A Day of Discovery Floral Arrangements for the Holidays
- 23 Thanksgiving Day Holiday Gardens open

December

- 8 Denver Botanic Gardens Members Herald the Season
- 9, 10 "Blossoms of Light" High Teas
- 16, 17 "Blossoms of Light" High Teas
- 19 A Day of Discovery Western Holiday
- 25 Christmas Holiday Gardens closed



Denver Botanic Gardens opens each day of the year, except Christmas Day and New Year's Day, at 9:00 a.m. and usually closes at 4:45 p.m. From May 27, 1989, through September 3 the Gardens will remain open until dusk each Wednesday, Saturday and Sunday.



- 11, 12 Gloxinia Gesneriad
Growers: Gesneriad Show & Sale
- 17, 18 Denver Botanic Gardens
Holiday Sale
- 21 A Day of Discovery: Floral
Arrangements for the
Holidays
- 23 Thanksgiving Day Holiday:
Gardens open

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African Violets March 25 and 26

On the weekend of March 25 and 26 the various clubs that make up the Rocky Mountain African Violet Council will join to present their spring African Violet Show and Sale at the Gardens. A sampling of other plants in the gesneriad family will also be presented.

Exhibit designs and artistic arrangements will reflect this year's theme of "Mountains of Violets." Besides the decorative displays, a special educational exhibit will portray interesting aspects of growing this nearly everblooming group of houseplants, and knowledgeable hosts will be on hand to offer cultural advice to visitors of the show.

Hundreds of plants, from rooted leaf "starters" to magnificently grown specimen plants in full bloom, will be for sale. Money earned will be shared with Denver Botanic Gardens.

Let this colorful show add a touch of springtime to your Easter weekend. While you're there, take time to become acquainted with members of some of the local African violet societies. Your interest may lead you to join.

Hours are 1:00 to 4:30 p.m. Saturday and 10:00 a.m. to 4:30 p.m. Sunday. More information can be obtained by calling either of the show's co-chairmen, Bonita Hutchison (781-2406) or Janice Sorenson (220-8799).

Pre-school Guides Needed for Popular Program

Do you enjoy bringing smiles to the faces of youngsters? Do you derive pleasure from helping a child understand aspects of the plant world? If so, read on.

In 1988 pre-school tours were led by enthusiastic guides who took three to five year-old children on special tours. The children were introduced to a very small garden by Snappy the Scarecrow, his puppet garden friends and his volunteer garden friends—the guides. They explored the garden with their guide and they all watched for the reappearance of Snappy's friends in various locations.

When found, the children knew whether to smell, look, listen or touch. Each stop provided opportunities to place their little noses into the flowers to enjoy sweet smells or to stroke with their tiny fingers the fuzzy surface of a leaf. This year we will again offer these sensory, fun-filled tours with the help of last year's guides and the enthusiasm of new guides from the 1989 training class.

Training begins Tuesday, April 18, at 9:30 a.m. Four two-hour classes will provide guiding techniques to lead very young children on rewarding and exciting tours. Guides will learn how to share botanical information in ways that children can enjoy. The classes will take place in the Morrison Center

at the Gardens. This is the location of the small garden for small people.

We are looking for special guides who enjoy talking about flowers, who enjoy being animated and enjoy young children. These tours will be held daily through the summer. The garden they explore is full of surprises and is constantly changing. You do not need to be a plant expert but you should enjoy the drama of flowers and sharing stories of bumblebees with four-year olds.

This is a volunteer position and by volunteering you will become eligible for certain benefits in addition to knowing that you have helped the Gardens meet the evergrowing demand for tours from school groups. The classes are scheduled from 9:30 to 11:30 a.m. and registration is only \$10 to cover materials.

The pre-school guiding season begins June 1 and ends October 1 and you might be asked to lead two to four tours each month of the summer—or more if you wish. For more information on this program, either as a guide or as a potential visiting group, call the education department at 331-4000, extension 20. To register complete the education department form in this newsletter.

Assist Snappy the Scarecrow and his friends Robin Redbreast, Buzzy Bee, Fuzzy Caterpillar and Lady Bug this summer and help some young children see the Gardens in a delightful way.



Snappy the Scarecrow introduces pre-school children to the Gardens.

1989 Plant and
Used Book Sale
Chairman Rob
Proctor



From Your Plant and Used Book Sale Chairman

It is gratifying to see how many people have already pledged to work at "The Flowering of Denver," the annual Plant and Used Book Sale on May 12 and 13. We're excited about the quality and diversity of plants to be offered this year. We promise the best in ornamental and edible plants, as well as fine quality tools and garden ornaments.

The book division, headed by Susan Coombe, will occupy the library basement and two classrooms. The selections run the gamut from mystery and mythology to cooking and the classics. The library is still accepting donations of used books in every category, as well as records, tapes and stamps. Profits help support acquisitions for the Helen Fowler Library. Volunteers are needed to help sort and sell. Please contact Solange Gignac at 331-4000, extension 32, to help.

The Volunteer Fair, scheduled for

Saturday, April 22, at 9 a.m. in John C. Mitchell II Hall, promises to be practically as much fun as the sale itself. Coordinated by Jeanne Ruggles, this event is designed to familiarize new and continuing volunteers with highlights of this year's sale. Division chairmen will introduce new plants and share cultural information, and the new simplified pricing system will be explained. To participate in the fair, please fill out the coupon below.

Additional training for cashiers will follow on Thursday, May 11, and even "old hands" are encouraged to participate, since the new pricing system will affect them. Cashiers will be notified later about the times for their sessions. As always, we can use donated adding machines.

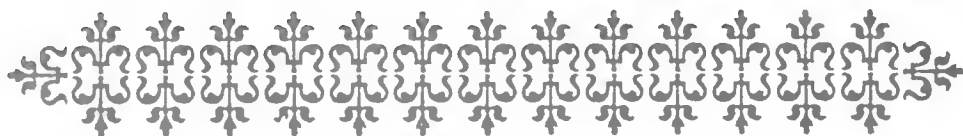
Plans are underway for the 1989 edition of the Preview Party on Thursday, May 11. With Janet Ellis at the helm, this year's party will continue a tradition of relaxed shopping with customized service. The chamber music of the Botticelli String Quartet will fill the air, and a lucky partygoer will win a rose garden designed especially for him. Look for details in the April edition of the *Green Thumb News*.

I consider "The Flowering of Denver" as the official kick-off for the gardening season, and I welcome your participation. Your enthusiasm as a volunteer or customer makes this fund-raiser such a blooming success.

Rob Proctor
Chairman
The Flowering of Denver, 1989



Volunteer for the
1989 Plant and
Used Book Sale.



1989 "Flowering of Denver" Plant and Used Book Sale Volunteer Sign up

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____

_____ I will be attending the "Volunteer Fair" April 22.

_____ I am unable to attend the fair, but contact me regarding how else I can be a Plant and Used Book Sale volunteer.

Mail to: Denver Botanic Gardens
Development Office
909 York Street
Denver, CO 80206

Programs on Channel Six of Interest to Members

Enjoy a rare odyssey to a mysterious land in the NOVA special, "Secrets of Easter Island." This two-hour special can be seen on Channel Six Tuesday, March 7, beginning at 7:15 p.m.

Dramatic encounters between predator and prey enliven a new two-hour episode from "The Best of Wild America." Titled "The Great Escapes," it can be seen on Thursday evening, March 2, beginning at 7:05 p.m.; it will be repeated on Sunday, March 5, in the afternoon at 1:30 p.m.

Weekday afternoons are made more interesting by Marty Stouffer and the Wild America series. This program looks at North American habitats and their inhabitants and can be seen at 3 p.m. each weekday.

Emerson R. Birchfield on "Garden Vignettes"

No doubt about it—gardeners are an impatient lot. You'd think we'd welcome a long winter respite from summer chores, but at the first hint of spring, we begin to fuss around the garden. We'd probably all be better off if we spent a little less time working in our gardens and a lot more thinking about them.

"The Flowering of Denver," the annual Plant and Used Book Sale, will be here soon enough, on May 12 and 13 to be precise. The Preview Party is on the evening of Thursday, May 11. In the meantime, our memories may be a bit clouded about our achievements of the year before.

I find it useful, albeit somewhat humbling, to pull out photos from the past few years for review at this time. These point out, in glorious color, the direction my garden is going. Each photo is a vignette from a given day, capturing one moment of an entire summer.

Changes are more noticeable when viewed in this way from year to year, rather than entrusted to a faulty memory. Sometimes we forget effective groupings or a favorite plant. I didn't plant cleomes last year, so I felt a pang when I pulled out a snapshot from two years ago. In one section of a deep perennial border, I had laced annuals through clumps of *Stachys byzantina*, lamb's-ears; *Linum perenne*, blue flax; *Centaurea montana*, perennial bachelor buttons; and asters and irises. The front and mid-sections held the pink-tinted annuals gomphrena, or globe amaranth, and nicotiana, while the back was anchored by the stately *Cleome spinosa*. Also called spider flowers, cleomes are old-fashioned annuals beloved by our ancestors but all-too-rarely seen now. Perhaps the scale of today's smaller gardens has made them difficult to situate, as any plant that grows to nearly six feet takes a bit of consideration before planting. Don't be intimidated! The airy charm of their pink, purple or white flower heads, six to eight inches across, is unique and long-lasting.

If your garden can accommodate these old-world aristocrats, they can be found in the annuals division of the plant sale. They will not, of course, be in bloom yet, so you will have to take my word that they are lovely. Cleomes are best situated behind bulky medium-size plants to disguise their spindly "legs."

Other photos reveal my growing affection for old-fashioned plants. I delight in the combination of pure white cosmos and pink zinnias complementing *Caryopteris x clandonensis*, often called 'Blue Mist' spiraea. This is a misleading name, since it is

not a spiraea at all; but I suppose the 'Blue Mist' is pretty accurate. This small shrub is a feathery mass of true blue in high summer. It's a lovely sight and a refined companion for roses, coreopsis or just about anything else.

Another photo activates my olfactory memory. In it, lavender 'Angel Face' roses are surrounded by pale yellow 'Moonbeam' coreopsis and bronze-leaved 'Gin' begonias tucked in for contrast. I am hesitant to single out any one rose for fragrance—it's such a matter of taste and there are so many good ones—'Double Delight,' 'Mount Lincoln' and 'Bewitched,' to



name a few. But I must admit I adore 'Angel Face' for its deep old-rose scent and unique color. I'm equally enthusiastic about 'Moonbeam' coreopsis. It is considered by many authorities to be among the top-ten perennials, and far be it for me to disagree. 'Moonbeam' blooms with abandon all season, and the small butter-colored blossoms are effective with pink, lavender or blue. I suspect it could be marvelous with the lavender bells of 'Blue Clips' campanula, so it looks like I will be needing a few more plants this year.

Not all of my vignettes embrace such a pastel palette. In one, 'Gold Gloriosa' daisies fairly leap off the print. There's nothing subtle about these daisies, properly called *Rudbeckia hirta*. Although sold as annuals, they often reseed themselves and behave like perennials. The variety 'Goldilocks' is pure gold and heavily doubled; 'Irish Eyes' has a green center disk; and the 'Rustic' mix is brilliant gold with dramatic center splashes of burnt sienna.

The big and brassy gloriosas need something cool and airy to go with them, something like a glass of beer with a spicy Mexican dish. At last year's sale, I discovered tall, dusty lavender *Verbena bonariensis*. Yes, it is a tall verbenas. It's another one that will not be blooming in its container at the sale, so you will once again have to trust me that it is wonderful.

Come to think of it, there are a good many annuals that do not come into their own until the warm days of summer. Many cannot be successfully "forced" into bloom in six-packs. Don't be dissuaded. Please consider not only

cleomes, rudbeckias and tall verbenas, but also strawflowers, sunflowers, snapdragons, tassel flowers, and cosmos. There is a definite plus to the anticipation and surprise they provide.

This discussion reminds me of an experience my old friend Mrs. R. had last year. By accident, she brought home a single plant of *Nicotiana sylvestris* from the sale. Assuming it would grow and flower in the manner of the 'Nicki' hybrids, which reach about two feet, she was stunned when this one leapt to a height of five feet and produced clusters of fragrant, down-facing white blossoms. Further investigation uncovered that "sylvestris" meant "tree-like." She had indeed grown a tree-like flowering tobacco. It did not produce the effect she had originally planned, but golly, that plant looked grand. Were it that all our mistakes turned out as well.

(Emerson R. Birchfield is our special correspondent for "The Flowering of Denver." He claims gardening is his life, except on Monday evenings when he sits down to watch "Alf.")



Although not flowering at the sale, cleomes bloom prolifically in late summer.

6 Chris Giftos

continued from page 1

Gardens to present Mr. Giftos and other speakers of such stature and interest is made possible by a grant from the Bonfils-Stanton Foundation. Members have received a brochure outlining this series. An additional ticket order form is printed in this issue. Because of the popularity of these lectures in past years, members are urged to buy tickets early. (If you haven't received this brochure, descriptive of all the lectures, please call the Denver Botanic Gardens education department immediately.)

Mr. Giftos' entertaining talk will begin at 7:00 p.m. in John C. Mitchell II Hall at 1005 York Street. For additional information call the education department, 331-4000.

1989 Bonfils-Stanton Lecture Series

This year's Bonfils-Stanton Lecture Series presents five internationally recognized, enthusiastic speakers

whose subjects encompass the multifaceted world of plants.

March Chris Giftos, master floral arranger of New York's Metropolitan Museum of Art, will share his experiences with "Flowers from the Met." He will demonstrate his creativity with flowers and lead the audience on a slide show tour of the museum's beautifully decorated social events.

April 11 Ian MacPhail will relate the humor and deceit he's culled from five centuries of "Rare Books and Unusual People." He is Research Fellow and Curator of Rare Books at the Morton Arboretum in Chicago and a renowned, entertaining speaker on rare books of botany and horticulture.

September 12 Frederick McGourty, author of several books and articles on gardening, will speak on "Perennial Combinations," an instructive look at creating scenes of beauty throughout the growing season through the imaginative choice of perennial plants.

October 10 Mary Tonetti Dorra will transport us to "Monet's Giverny:

A Painter's Garden." An expert on this and other classical 17th and 18th century French gardens, she will use slides of the restored garden in all three blooming seasons to compare reality to the visions of artists who have painted it.

November 14 James van Sweden will champion his view of "The New American Style of Garden Design." Trained in landscape architecture and urban design, he is acclaimed for a fresh new style that often uses dramatic sweeps of ornamental grasses and massed perennials.

This series of enlightening talks is made possible by a generous grant from the Bonfils-Stanton Foundation.

Each exciting lecture will be held at 7 p.m. on the second Tuesday of its month in the Gardens' John C. Mitchell II Hall at 1005 York Street. Information on tickets for both the five-lecture series and for individual evenings can be found on the ticket reservation form printed in this issue. For more information call the education department at 331-4000, extension 20.

BONFILS-STANTON LECTURE SERIES TICKET RESERVATION FORM

Members may attend lectures at \$3 each or \$12 for the series of five; non-members are welcome at \$6 per lecture or \$24 for the series.

I am enclosing a self-addressed stamped envelope for tickets and a check made payable to Denver Botanic Gardens in the amount of \$ _____.

Please send me _____ member five-lecture series reservation(s) at \$12 each.

Please send me _____ non-member five-lecture series reservation(s) at \$24 each.

I am not purchasing a series reservation. Please send me the following number of individual lecture tickets at \$3 per lecture for members; \$6 per lecture for non-members.

March 14, 1989	_____	Member ticket(s)
Chris Giftos	_____	Non-member ticket(s)
April 11, 1989	_____	Member ticket(s)
Ian MacPhail	_____	Non-member ticket(s)
September 12, 1989	_____	Member ticket(s)
Frederick McGourty	_____	Non-member ticket(s)
October 10, 1989	_____	Member ticket(s)
Mary Tonetti Dorra	_____	Non-member ticket(s)
November 14, 1989	_____	Member ticket(s)
James van Sweden	_____	Non-member ticket(s)

Name _____

Address _____

City _____

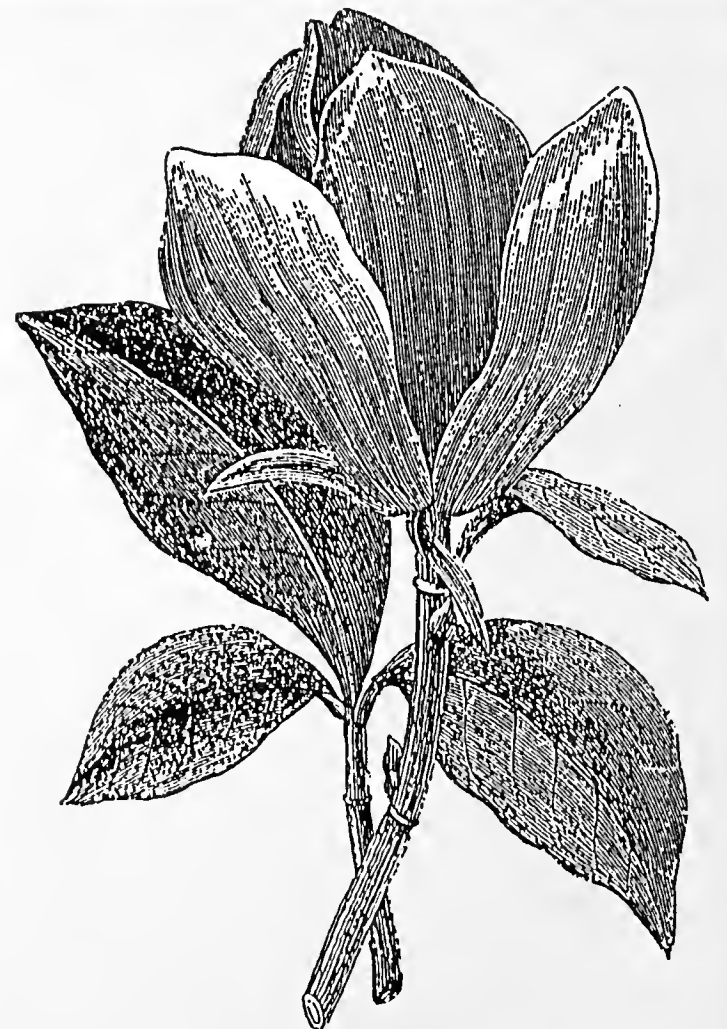
State _____ Zip _____

Daytime Telephone _____

Please enclose a stamped, self-addressed envelope for ticket return. Tickets will be mailed provided reservation is received at least one week prior to lecture date.

(If space is available, tickets will also be sold at the door prior to each lecture.)

Mail to Bonfils-Stanton Lecture Series, Denver Botanic Gardens, 909 York Street, Denver, CO 80206.



Blossoms of Light Thank You

Denver Botanic Gardens staff and Board of Trustees would like to thank Meredith Wilkins, Carolyn Longmire, their Blossoms of Light Committee and all the volunteers, for the many dedicated hours they contributed in making the December holiday activities at the Gardens a success.

A very special thank-you goes to WearEver-ProctorSilex, the underwriter of the entire event and to Celestial Seasonings Inc. who underwrote the Teddy Bear Teas. Other companies and individuals whose services and donations helped to make the events successful were: Bank Western, Angle Tree Company, United Floral Industries, and Denver Botanic Gardens Trustee Deane Hall.

All seatings for both the High Teas and Teddy Bear Teas were sold out.

The new activities, the Quilt Sale and Wednesday evening musical performances by the Botticelli String Quartet and the Aries Brass Quintet, were well received.

Many visitors, some from as far away as Australia, enjoyed the lights throughout the grounds and the displays from Bets O'Meara's collection and from the Denver Museum of Miniatures, Dolls and Toys in the Lobby Court and John C. Mitchell II Hall.

Cactus and Succulent Show and Sale

The Colorado Cactus and Succulent Society will hold its annual show and sale at the Gardens on Saturday and Sunday, March 18 and 19.

From around the state, people who love growing succulents look forward to this show because of the great diversity of plants that are always included. Thousands of fascinating examples will be on display and for sale, exhibited by amateur and professional growers.

And whether you're interested in tropical specimens for a sunny spot in your home or in hardy plants for a dry location in your outdoor xeriscape, experts from the society will be on hand to guide your choice and give you valuable tips for success.

The show will be in John C. Mitchell II Hall at 1005 York Street, open from 9:00 a.m. until 4:45 p.m. each day. As usual, there will be no charge beyond the Gardens gate fee to view the show. Of course, members of the Gardens enter free.

For more information call H.V. Rodman, chairman of the show, at 278-7590.



The Teddy Bear Teas were fun for all who participated!

News from the Gift Shop

In early March most Colorado gardeners have to restrict their activities to planning for the warmer months ahead. Still, that can be a very pleasurable pastime. The gardens of our imaginations are untouched by aphids, unaffected by clay soils and drying winds but lush with flowers and fruits.

In addition to poring over seed and plant catalogs, try the Denver Botanic Gardens Gift Shop for another great resource—books, books and more books.

A companion to the *Book of Dried Flowers*, *The Book of Fresh Flowers* by Malcolm Hillier is a celebration of the beauty of flowers. Beautifully and lavishly illustrated, this guide takes you through every step necessary to create fresh flower arrangements for every occasion. He discusses sources of materials available in each season and reveals helpful tricks of the trade.

For herb enthusiasts, Lesley Bremness' *The Complete Book of Herbs* is a comprehensive and practical guide to growing and using herbs indoors and out. It features a full-color, photographic guide to over 100 varieties with notes on cultivation as well as traditional and present-day usage. This book includes recipes, ideas for both therapeutic and cosmetic uses, instructions for creating decorations and gifts, and designs for herb gardens.

Apartment and townhouse dwellers don't need to miss out on the pleasures of gardening. Lizzie Boyd's *Window Gardens* offers inspiration and information. She uses annuals, succulents, bulbs and more permanent plantings of perennials, shrubs and climbers to create color schemes and plant combinations both conventional and unusual. *Creating Small Gardens* by Roy Strong is another creative

source for those who want to garden but are limited by a small patio or yard.

If you want to try something different this year, Barbara Damrosch's *Theme Gardens* gives complete information on creating 16 different gardens including a garden of old roses, a Shakespeare garden, a butterfly garden and a secret garden.

One of the many books available in the Gift Shop.

THE DRIED FLOWER BOOK

Growing · Picking · Drying · Arranging



Annette Mierhof/Marijke den Boer-Vlamings

Native plant lovers should not miss *Wildflowers Across America* by Lady Bird Johnson and Carlton B. Lees. This is both a tribute to the beautiful wildflowers of our country and a strong plea for increasing the use of native plants and wildflowers in our landscaping. This is an informative and aesthetically satisfying book.

These are only a small sampling of the varied book selection available at the Gift Shop. The shop also carries Denver's largest selection of the Brooklyn Botanic Gardens' special topic books, plant guides, many children's books and, of course, the Garden's own *Meet the Natives* guide to Rocky Mountain wildflowers.

Winter
1989
Denver Botanic Gardens

CLASSES



The Four-Season Rock Garden

(four sessions)

Mondays, March 6, 13, 20, 27
7 to 9 p.m. Classroom C

Everybody loves a rock garden in the spring. After a long, cold winter, nothing gives more pleasure than those first tiny bulbs and showy, early mats of color. The most successful rock gardens, however, are planned for flowering at all seasons. Even when not in bloom, a proper selection of rock plants will have interesting foliage, textures and colors.

This class is organized to provide the homeowner with the information needed to create a truly year-round garden.

Learn which plants produce waves of blossoms in the spring and maximize their effect. Find out which summer-blooming rock alpine plants from Asia, the southwestern United States and South Africa have tested successfully in our Rock Alpine Garden. Discover which rock plants, from asters to zauchnerias, bask in the balmy days and cool nights of autumn. Plan for winter interest with dwarf conifers and tough plants that will actually flower when the weather is mild.

Instructor: Panayoti Kelaidis is curator of our award-winning Rock Alpine Garden as well as an enthusiastic teacher who enjoys sharing discoveries gleaned from his eight years at Denver Botanic Gardens.

Fee: \$32 members/\$35.50 non-members

Native Colorado Conifers and their Natural History

(two sessions)

Wednesdays, March 8, 15
6 to 8 p.m.
DBG's Morrison Center at 11th and York Streets, Denver

Can you distinguish a one-seeded juniper from a Utah juniper? Learn how to correctly identify Colorado's native junipers, pines, spruces and firs from characteristics such as cones, needles and bark.

Look at cross sections and fresh branches and discuss annual rings. Specific plants, animals, climate and soil associated with our evergreens will all be covered.

Bring note-taking materials and a hand-lens, if you have one.

Instructor: Tina Jones, popular field trip leader and naturalist, studied alpine ecosystems at the University of Colorado, Boulder, Research Center outside of Ward, Colorado.

Fee: \$16 members/\$17.50 non-members

Garden Design: An Artist's Approach

(four sessions)

Saturdays, March 11, 18, (skip March 25), April 1, 8
10 a.m. to noon Classroom C

Gardening is more than finding the right spot for the right plant. How plants relate to one another in the garden, and the effects that can be achieved with color, form and texture will be explored.

The focus of this course is the artistic aspect of gardening, with each segment addressing a specific topic in garden design.

Saturday, March 11
"Color in the Garden"

The use of color is a personal expression, and it can produce serene or explosive effects. Color combinations can be either subtle or daring. Classic color schemes and some unusual ones will be presented, as well as the flowers that create contrast or harmony.

Saturday, March 18
"Combining Annuals and Perennials"

Traditional perennial gardening often excludes annual flowers. This is a shame since annuals can be a real asset to the herbaceous border. This session will describe how to incorporate them into perennial plantings, to contrast, unify or accent. Tall, medium and short varieties will be featured to supplement existing plantings, and as star performers themselves.

Saturday, April 1
"Color in the Shade"

Nothing is as worrisome to the gardener as a shady bed. The choices for deep shade are somewhat limited, but through the use of annuals, perennials, bulbs and containers, the creative gardener can achieve lovely results. The partially shaded garden has huge potential for glorious color and there is a wealth of plants well-suited to Denver.

Saturday, April 8
"A Season of Bloom"

The goal of every gardener is to enjoy flowers throughout the growing season. Too many gardens peak in early summer. This session will concentrate on how to achieve maximum color from spring to frost, and beyond. Perennials with extended blooming periods and varieties for late summer and autumn flowers will be covered.

Instructor: Rob Proctor creates art in his garden and art from his garden. His botanic drawings hang in the Smithsonian Institution as well as col-

lections throughout the world. Rob draws his inspiration from his award-winning garden that will be featured in an upcoming issue of *Fine Gardening*.

Fee: \$32 members/\$35 non-members

Water Gardening for Colorado

(two sessions)

Thursdays, April 6, 13
7 to 9 p.m. Classroom B

With such diverse plants as the smallest flowering plant in the world (*Wolffia* sp.), and the giant water platter (*Victoria* sp.), the world of aquatic plants offers excitement to both professional gardeners and amateurs.

The content of this how-to course includes: water gardening history; pool design and construction; variety selection, cultivation, and display; hardy and tropical bog plants; half-barrel displays; the culture of the Victoria water lily and lotus, as well as floating plants; sources of plant material and special problems.

Through slide presentations, demonstrations and discussions, learn to incorporate these unusual plants into your home and landscape.

Instructor: A Gardener-Florist II at Denver Botanic Gardens, Joseph V. Tomocik maintains our Aquatic Plant Display and enjoys sharing his enthusiasm for these "wet wonders" of the plant kingdom with others.

Fee: \$16 members/\$17.50 non-members

Tree Walk at Fairmount Cemetery, Denver

(one session)

Sunday, April 23 1:30 to 3:30 p.m.

During the summers of 1890 and 1891, over 4,000 trees including seven species of oaks, sycamores, silver maples, Kentucky coffee trees and pines were all planted at Fairmount Cemetery. This is an opportunity to observe these as well as some more unusual trees such as scarlet oak and yellow buckeye.

A walk through these mature, historic specimens will sharpen your identification skills.

Instructor: Dr. William G. Gambill, Jr., Director Emeritus and taxonomist at DBG, is a former botany and biology professor.

Meet: promptly at 1:30 p.m. just inside the entrance of Fairmount Cemetery which is located at East Alameda and Quebec Streets in Denver.

Fee: \$7.50 members/\$8.25 non-members (includes \$3 for *Trail of Trees*, a 64-page illustrated guide to Fairmount Cemetery)

Herbs for Flavor

(three sessions)

Thursdays, April 6, 13, 20

7 to 9 p.m.

Morrison Center at Denver
Botanic Gardens

The attractive forms, colors and textures of the culinary herbs make them ideal garden plants, and nothing can compare with their freshly harvested flavor.

Learn to plan an herb garden as well as to cultivate and harvest the major cooking herbs.

In hands-on greenhouse sessions, participants will propagate a variety of herbs from seeds and cuttings to take home for their own gardens.

Instructor: DBG Education Director Pat Pachuta is a horticulturist who combines her enthusiastic interests in gardening and cooking by growing herbs.

Fee: \$30 members/\$33 non-members (includes \$6 for materials)

Limit: 15

Beginning Ikebana Lessons

(four sessions)

Saturdays, April 1, 8, 15, 22

9:30 to 11:30 a.m.

Classroom B

In this introductory course, students will view slides and gain a preliminary understanding of four schools of arranging: Ikenobo, Chiko, Ohara and Sogetsu. They will practice and take home beginning styles of light, airy arrangements using spring flowers such as irises and pussy willows.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water) and notebook.

Although flowers will be provided, students should bring their own line material (branches) cut from their yards.

Instructor: Joan Wooldridge is past president of Ikebana International and has teacher's certificates in two schools.

Fee: \$44 members/\$47 non-members (includes \$12 for flowers)

Limit: 12

Advanced Ikebana Workshop

(one session)

Saturday, April 29

9:30 to 11:30 a.m.

Morrison Center at Denver
Botanic Gardens

This workshop is for students who have already had some instruction in ikebana and are interested in continuing their lessons.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water), tall (ten inches or more) container for vase and notebook.

Students should also bring their own line material and flowers.

Instructor: Joan Wooldridge

Fee: \$8 members/\$9 non-members

Limit: 12

Calligraphy: Beginning Italic

(six sessions)

Tuesdays, April 11, 18, 25, May 2,
9, 16

1 to 3 p.m.

Classroom B

This introductory course is designed to teach students basic letter forms of the Italic alphabet, the use of proper materials, color and simple design. This is an excellent course for creating a solid foundation in calligraphy.

Please remember to bring to the first class: drawing board (at least 16 by 20 inches), a black fine point marker, pencil, eraser, ruler (18 or 24 inches) and masking tape. There will be a \$5 materials fee, payable to the instructor, at the first class.

Instructor: Alicia McKim studied art at Western State College and is a freelance calligrapher whose work is exhibited widely.

Fee: \$48 member/\$53 non-members, in addition to the \$5 materials fee that will be collected at the first meeting.

Limit: 12

Beginning Botanical Illustration—Springs Unfolds

(six sessions)

Tuesdays, March 21, 28, April 4,
11, 18, 25

9:30 a.m. to 11:30 a.m. Classroom B

This introductory course will stress accurate drawing of flowers, roots, stems and leaves. Fresh spring flowers from the garden, including tulips and daffodils, will be used and dissected when required to draw individual plant parts.

No previous drawing experience is necessary and students will work with pencils, colored pencils and will finally progress to watercolors. This course is certain to increase your observation skills and heighten your enjoyment of spring.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$54 members/\$59 non-members (includes a \$6 materials fee)

Limit: 12

Watercolor Painting

(five sessions)

Wednesdays, March 29, April 5

(skip April 12), 19, 26,

(skip May 3), May 10

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Morrison Center at Denver
Botanic Gardens

Please indicate your section on the registration form.

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: 1½-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$60 members/\$66 non-members

Limit: 12

Watercolor Eggs

(two sessions)

Saturdays, March 18, 25

1 to 3 p.m.

Classroom B

If you have a bit of patience and a steady hand, you can learn to create fanciful decorations for the Easter season. With step-by-step instruction, turn a humble uncooked egg into a jewel-like creation. Hang your fanciful eggs on a bare branch to make an Easter tree.

Please bring several uncooked eggs, a bowl, a large needle, watercolors, acrylics or fine markers and a number one watercolor brush to class.

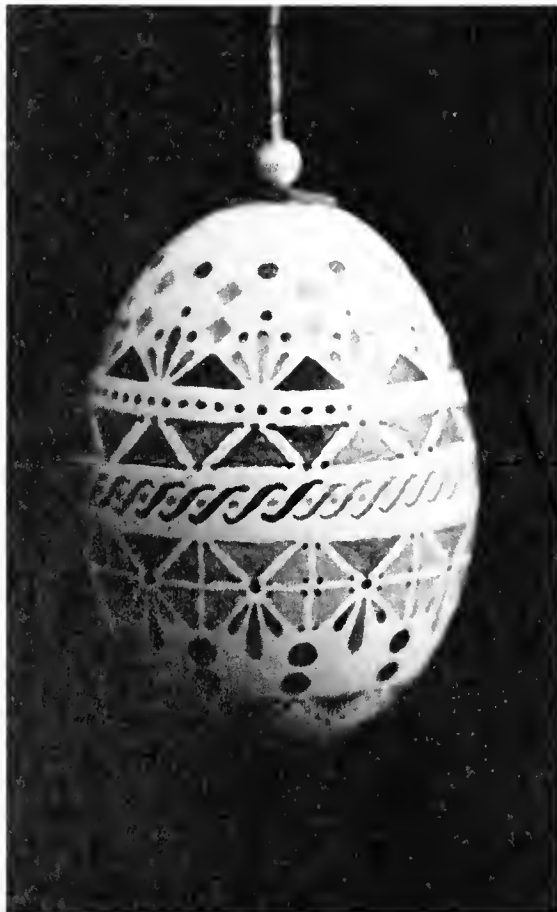
Instructor: Rob Proctor is an artist and author who gets eggstravagant during the holidays.

Fee: \$26 members/\$29 non-members (includes \$10 for materials)

Limit: 15

Pine needle-raffia basket by instructor Debbie McClelland.

Watercolor Egg designed by instructor Rob Proctor.



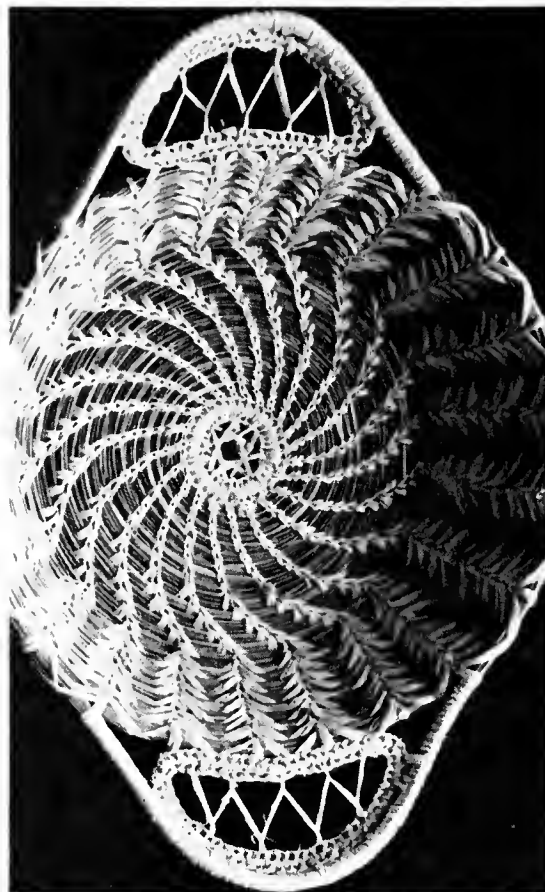
Pine needle-raffia ornament by instructor Debbie McClelland.

Basketry Techniques: Pine Needle-Raffia

(three sessions)

Section I: Mondays, April 10,* 17, 24

Section II: Tuesdays, May 9,* 16, 23



6 to 8:30 p.m. except April 10* and May 9* when the class ends at 9 p.m.

Morrison Center at Denver Botanic Gardens

Please indicate your section on the registration form.

This elegant style of basket is constructed through a coiling technique using long-leaf pine needles and raffia. Suitable pine needles, from 6-18 inches long, are found on the West Coast, in the Great Lakes region and on the southeastern Gulf Coast. Natural raffia is used for the stitching and intricately woven patterns.

With homework, each student can expect to complete a modest-sized basket designed specifically for this class. Variations on the design or individually designed baskets, however, are highly encouraged.

Beginners and experienced basket-makers are all welcome. Don't forget your scissors; all other materials will be provided.

Instructor: Debbie McClelland studied art education at Eastern Michigan University and has conducted many classes and demonstrations that showcase her expertise in

this revived Civil War art.

Fee: \$36 members/\$39 non-members (includes a \$4 materials fee)

Limit: 10 per section

Basketry Workshop: Pine Needle-Raffia Ornament

(one session)

Saturday, April 29

9 a.m. to 3:30 p.m.

Classroom B

Experience the delightful craft of making delicate lacelike pine needle-raffia ornaments. Each student will learn the basic techniques of this type of basketry and should be able to complete one ornament or trivet during this workshop. The finished work can be hung now to grace your home or can be tucked away until the holidays.

Written instructions and illustrations for three ornament designs will be provided. Variations on the design and student innovation, however, is



highly encouraged. Don't forget your scissors and a sack lunch and beverage; all other supplies will be provided.

Instructor: Debbie McClelland

Fee: \$26.50 members/\$29 non-members (includes \$2 for materials)

Limit: 10

Denver Botanic Gardens

909 York Street

Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Planning. Looking ahead. Dreaming. It's the best part of landscaping your home.

It's also the most important part. Careful planning not only helps make dreams come true but prevents disappointment later on. Mistakes and disappointment tend to last longer than the original designing would have taken.

The fundamental principals of design are not abandoned in xeriscaping. The finished yard will still have to fulfill the uses and aesthetics of you and your family. As with less efficient landscapes, your xeriscape should still be as individual as you are and should reflect your lifestyle. It should also give pleasure the year-round and provide areas for both rest and for your preferred leisure activities.

However, your xeriscaped property has one added criterion. Besides being pretty and useful, you've determined that it must be efficient—in its consumption of water, of time and of work. This should be considered not a restriction but an opportunity to let your imagination and resourcefulness take wing.

If it's your good fortune to be starting with a new, unplanted property the possibilities are nearly unlimited. You have a chance to make your yard into one that complements its surroundings and, in turn, is enhanced by them. It can more strongly proclaim its regional identity.

However, even a previously landscaped property can be altered to take advantage of the xeriscape principals. In the process it can be made beautiful, more individual and more suitable for your purposes.

To renew an older yard, a new first-step is added to the planning process: deciding what to get rid of. This often presents hard choices. Is the mature spread of a large silver maple an asset measurable in terms of cooling shade and years of growth? Or will that very shade hamper your efforts to redesign the yard with water-shunning—and mostly sun-loving—plants? Does the spread of its hollowed, inherently weak limbs actually present a threat to structures below? Mature plants, especially trees, have real monetary value, but will future savings in water bills soon outweigh that value?

A creative approach to your relandscaping challenge will help you make your hard choices. And creative landscaping is an essential element of successful xeriscaping.

Whether you're working with raw land or a raw deal from the past, your planning should begin with at least a rough estimation of the dimensions you're working with and the location

of existing, unchangeable structures. Among the latter are streets and alleys, municipal utilities and, usually, the garage entrance. As for the house, don't initially rule out changing its main entrance; the fewer sacred "unchangeables" you begin with, the more likely you'll come up with a design with lasting satisfaction.

Then begin your landscaping on paper. Crude sketches may be adequate if you have a clear picture in your mind's eye. Even if you will leave the final design to a professional, you can and should do this part yourself. Remember, because it is on paper, it can be changed as often as you want.

First, plan for your family's activities and outdoor interests. Where on the site can these most handily and pleasurably be accommodated? From repairing motorcycles to raising rabbits, or vegetable gardening to iris breeding, decide where these activities could best take place on your particular piece of ground.

Consider exposures and slopes. Southern exposures and slopes usually dry out quickly after watering and warm up early in the spring. These places deserve special attention in your design. This is especially true close to buildings, and it can be either a problem or an advantage, depending on your planning. Will you have a lawn chronically in need of water or an entrance easy to keep free of snow? Terracing of slopes inhibits water runoff and is a proven xeriscaping device.

Keep in mind the seasons. Whether an area is primarily for activity or for ornament, plan it for year-round pleasure. Colorado often has amazingly mild days in the non-summer months. You should be able to take advantage of them in your yard. Even vistas accessible only from within your window should be designed to give a pleasant view all year.

Reduce turf areas to a minimum. Whether its of bluegrass or of another grass, turf is usually more demanding of maintenance. And, of course, bluegrass is notorious for its thirst.

With the above considerations in mind, approach the actual placement of plants carefully, still on paper, and follow this highest xeriscape principle: **Group those plants together that have the same requirements for sun, drainage and other soil conditions and, most important of all, water! Divide your property up into zones.**

A thoughtful xeriscape can include plants that demand more water than our climate usually provides, but they must be planted in proximity in order to realize over-all water savings. If

you do decide to install a small bluegrass lawn, then your other water-loving plants should be planted nearby, for example: birches, most common annuals and many of our traditional shrubs.

A xeriscape may take a bit more planning and awareness than traditional landscaping. In fact, once we've gotten used to xeriscaping, the older ways will begin to appear lazy. But it's the planning that will ensure its success and will allow us to save not only water but work in the future.

Larry Latta
Botanist-Horticulturist
Denver Botanic Gardens



Joan Schwarz discovers the spring bloom on *Magnolia x loebneri* 'Leonard Messel' in the Rock Alpine Garden.

March Tips

—Finish pruning shrubs this month, but only those that bloom on the current season's growth. Postpone pruning, until after they've flowered, those early bloomers such as forsythia, lilac and flowering quince.

—Saint Patrick's Day (the 17th) is the traditional day for sowing peas. Is your garden soil ready, with compost and other organic matter worked in? Vegetables need deep, enriched soil.

—If you didn't get around to planting any minor bulbs last fall, take the time now to notice the ones blooming throughout the city and at the Gardens. Make notes to help you order this fall.

—Seed indoors: Early in the month sow ornamental grasses, salvias and impatiens. For the vegetable garden, sow tomatoes, peppers and eggplants. The last week of March plant seeds of fast growers such as zinnias, marigolds, rudbeckias and sweet alyssum.

C M A R

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

A	L	E	N	D	A	R
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
	Groundwater Symposium, The Four-Season Rock Garden*	Groundwater Symposium	Native Colorado Conifers and their Natural History*			Garden Design: An Artist's Approach*
12	13	14	15	16	17	18
		Bonfils-Stanton Lecture Series begins				Watercolor Eggs, Cactus and Succulent Show and Sale
19	20	21	22	23	24	25
Cactus and Succulent Show and Sale						Spring African Violet Show and Sale
26	27	28	29	30	31	
Spring African Violet Show and Sale			Watercolor Painting*			

Coming Next Month

April 1
Rose Symposium, Beginning Ikebana*

April 10
Basketry Techniques: Pine Needle-Raffia*

April 11
Calligraphy: Beginning Italic*

April 12
Bonfils-Stanton Lecture Series continues

April 29
Basketry Workshop: Pine Needle-Raffia Ornament, Advanced Ikebana Workshop

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE

March 1989



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Rare Book Expert Ian MacPhail to Speak

Ticket holders for the next Bonfils-Stanton Lecture, Tuesday evening, April 11, will enjoy a most unusual presentation: "Rare Books and Unusual People" by Ian MacPhail.

Mr. MacPhail has entertained many audiences with his telling of the humor, deceit and spiraling values in the market of rare books.

As the Curator of rare books at Morton Arboretum he is one of the most knowledgeable people of his field. Born in Malaysia and educated in Scotland, he pursued his interesting vocation in libraries in Ireland, Canada and the West Indies before coming to the United States.

Mr. MacPhail will preface his talk with a discussion of what constitutes a rare book and the place that these treasures hold in the history of botany and horticulture. Then he will present a study of rare books and their authors through five centuries. Beginning at 7:00, it will be an evening that will leave plant lovers, historians and bibliophiles enchanted.

If you don't already have your series tickets to the Bonfils-Stanton Lectures, or if you wish to buy tickets for this evening only, call the education department at the Gardens, 331-4000, extension 20.



Green Thumb

NEWS

Denver Botanic Gardens

April 1989

Number 89-4

Urban Horticulturist Nina Bassuk Presents "Life in the City"

On Thursday, April 27, at 7:30 p.m. in John C. Mitchell II Hall, Denver Urban Forest and Denver Botanic Gardens will present Nina Bassuk of Cornell University's Urban Horticulture Institute. Her illustrated talk, "Life in the City" will be provided as part of Denver Urban Forest's "Tree-Mend-Us Denver" program.

The city is a tough place to live if you are a tree. Nina Bassuk will be exploring the challenges of greening our cities in her program "Life in the City"—or how we can find solutions to the problems of growing plants in the city. She will discuss the causes of early street tree mortality as well as a multifaceted approach to solving these problems. The Urban Horticulture Institute at Cornell was the first program in the country specifically set up to look at the problems of growing plants in cities. Research results from the Institute will be a part of her presentation.

Ms. Bassuk is currently an Associate Professor in the Department of Floriculture and Ornamental Horticulture and Program Leader of the Urban Horticulture Institute at Cornell University, Ithaca, New York. A native
continued on page 2

Volunteer Thank You

"Victorian Gardens: A Horticultural Extravaganza" left Denver Botanic Gardens in February after a brief, but successful, visit. This accomplishment was made possible in part by some generous volunteer support.

Many volunteers braved the cold and snow that began on the opening day and continued until the close of the exhibit and thanks go to them for their loyal support and diligence. Special appreciation is due to Pat Hoffman for her efforts with the recruitment and coordination of the volunteers. Additional thanks go to Eldon O'Neal for his willingness to assist with the showing of the film, "The Secret Garden."

Events at the Gardens are generally a result of staff and volunteer efforts and the success of these events can be dependent upon the enthusiasm of both. If you would like more information on becoming a member of the volunteer team at the Gardens, call Joedy Arnold at 777-9404.



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*Rare book expert
Ian MacPhail
at the Gardens
April 11.*

2 Nina Bassuk

continued from page 1

New Yorker, Dr. Bassuk received her bachelor's degree in Horticulture at Cornell and then went on to receive her doctorate from the University of London while carrying out her research at the East Malling Research Station in Kent, England. Her current work in Cornell's Urban Horticulture Institute focuses on the physiological problems of plants grown in urban environments, using New York City and Ithaca as test areas. Currently she is also chair of the International Society for Horticultural Sciences' Commission for Urban Horticulture.

Denver Urban Forest is joining with

the Gardens to present this informative evening. D.U.F. is a citizens' organization formed of many civic and neighborhood groups and government agencies, as well as individuals to address the problems associated with the loss of our urban trees. They believe that "the urban forest can best be maintained and expanded by alerting citizens to the problem, by advising them of the solutions and encouraging them to take action."

The public is invited to attend this "Tree-Mend-Us" evening on Thursday, April 27, at 7:30 p.m. A \$3 lecture fee for both members and non-members will be charged. No advance registration is necessary; this fee will be accepted at the door.

*Volunteer Guide
Jean Sarabia
enjoys leading
pre-school
groups.*



Tributes

In honor of Lisa Ireland

Mr. & Mrs. Newell Grant

In honor of Mack Stewart

Mr. & Mrs. Newell Grant

In memory of Charles Canepa

Mrs. Robert Waterman

In memory of Dr. Giles Filley

Jane Silverstein Ries

In memory of Lula Hansen

Colorado Watercolor Society

In memory of Ruth Hubner

Mrs. Virginia S. Lilly

In memory of Roberta McDougal

Mrs. Arthur Hiner, Jr.

Beatrice Jane Jones

Ms. Velma Kester

Mr. & Mrs. John N. Lantz

Mr. & Mrs. Edward Lehman

Mr. W. W. Pressey

In memory of Mrs. Davis (Ellen) Moore

Mr. & Mrs. Thomas E. Taplin

In memory of Frances Pyeatt Sargeant

Alexandria W. Adams

Mr. & Mrs. John M. Dickson

Vivi B. Dobbins

Mr. & Mrs. John F. Falkenberg

Stephanie A. Foote

Mrs. Joseph E. Gandy

Mr. & Mrs. Ted Hackworth, Jr.

O. Ben Haley, Jr.

Joe and Jean Hodges

Mrs. Stanley H. Johnson

Mrs. Thomas B. Knowles

Mrs. Mason K. Knuckles

Josephine M. Ladner

Mrs. William C. Nevin

Mr. & Mrs. F. George Robinson

Mrs. Finlay Robinson

Mr. & Mrs. John Ryland

Betty & Lloyd Steinmann

Mr. & Mrs. Thomas E. Taplin

Mrs. Anne H. Weckbaugh

John B. Welborn

Mr. & Mrs. Robert F. Welborn

In memory of Clara A. Sill

Dr. & Mrs. Albert Patten

In memory of William Tempest

Mrs. Robert Waterman

In memory of J. Kernan Weckbaugh

Mr. & Mrs. Thomas E. Taplin

Training for Pre-school Guides Begins April 18

Pre-school guide training begins Tuesday, April 18, at 9:30 a.m. In this four-week class, adults will learn to lead young children on tours and to present plant information through the use of puppets.

In the 1988 season enthusiastic guides saw more smiling faces (children and adults) than expected. The training provided techniques that included how to locate the furriest plants for Fuzzy Caterpillar to watch from and the most fragrant flowers for Buzzy Bee to land on. All of this activity was directed by Snappy the Scarecrow.

The sensory tours are designed for three to five year-olds. Guides need to enjoy children of these ages and feel comfortable being creative and spontaneous. You will be provided in the classes with information on plants and guiding techniques.

The season begins June 1 and concludes October 1. You might be asked to lead two to four tours each month of the summer—or more if you wish. For additional information about this volunteer position, call the education department at 331-4000, extension 20. Registration is \$10, and all you need to do is complete the education department form in this newsletter and mail it to the Gardens. The class is from 9:30 to 11:30 a.m. on Tuesdays. It meets in the Morrison Center, which is located on 11th Avenue between York and Josephine Streets.

Assist Snappy the Scarecrow and his friends Robin Redbreast, Buzzy Bee, Fuzzy Caterpillar and Lady Bug this summer and help some very young children see the Gardens in a delightful new way.

Green Thumb News

Number 89-4 April 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than March 20 for May, April 20 for June and May 19 for July.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, extension 20, for details.



Accredited by the
American Association
of Museums

The Board of Trustees of Denver Botanic Gardens invites you to

"The Flowering of Denver"

*Pre-Sale Party
for
The 40th Annual Plant
and Used Book Sale*

*Thursday, May 11, 1989
5:00-8:00 p.m.*

*at
Denver Botanic Gardens*

This is a grand opportunity to select from the "cream of the crop" of the plants at the sale, meet old friends, listen to music by the Botticelli Quartet, enjoy a scrumptious buffet by Panache, avoid the crowds and have volunteers help choose your plants and load your car. Just by making a reservation one lucky person will win this year's special Rose Garden to be awarded on the evening of the party. We will even help that person design and plant the Garden. All plant lovers are welcome.

*Cocktail Buffet Cash Bar
Casual Dress
Entertainment and Enticements
\$40 Per Person
(\$25 tax-deductible donation)*

☐ *Enclosed* is my check for \$_____ for _____ reservations.

☐ *I cannot* attend, but enclosed is my tax-deductible contribution of \$_____

Name(s) _____

Address _____

State _____ Zip _____ Telephone _____

Mail to: Mrs. Richard Garbe
Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

*Reservations are a must!
Reservation deadline - May 5th
Make checks payable to Denver Botanic Gardens*



Chatfield Arboretum Highlights

3

Trees, trees and more trees is the "password" at Chatfield Arboretum this spring, as 3,010 seedlings and balled and burlapped trees need to be planted. As part of the ongoing process of landscaping the Arboretum, this spring's tree project will be the most ambitious planting yet to be undertaken at the Arboretum.

All interested volunteers are encouraged to attend the Saturday, April 1, orientation from 9 a.m. to noon at Chatfield's Visitor Center to hear plans for this year's volunteer projects. The proper techniques for planting trees and shrubs will be demonstrated after a brief overview of the Arboretum's history. Tree plantings will be held the following four Saturdays, April 8, 15, 22 and 29, starting at 9 a.m., weather and soil conditions permitting.

In addition to tree planting, a wide variety of volunteer openings are available throughout spring and summer. Grounds care is an essential, ongoing undertaking, as well as horticultural and historical research. An extensive remodeling of one of the Green farm homes will require the expertise of those who enjoy repair and building projects.

Administrative help is also needed, with or without secretarial talent. Plant enthusiasts are encouraged to call Chatfield Arboretum, 973-3705, to sign up for specific planting projects and other volunteer opportunities.

Thirty new Naturalist-Guides will be finishing their training this spring. Currently, the Arboretum is open to scheduled guided tours on Tuesdays, Thursdays, Fridays and Saturdays. School groups, clubs and scout troops should contact Frank Shupe Naturalist-Guide coordinator at 934-1572, or the Arboretum at 973-3705, to arrange tours.

Renovations will be underway at Chatfield Arboretum on the Green Farm.

A Day of Discovery

Tuesday, April 18, will begin a series of monthly information-packed mini-workshops at the Gardens called "Days of Discovery." Each of these days, organized by the Denver Botanic Gardens education department, will offer authoritative lectures, demonstrations, handouts and, weather permitting, tours centered around a specific group of interesting plants.

Speakers for Days of Discovery will be drawn from the Gardens' knowledgeable staff and interesting experts of the region.

April's Day of Discovery features cacti and other dryland plants. At this time the Lobby Court will feature unusual desert plants in an educational display prepared by the Gardens plant collections department.

Planned is a tour of our hardy cacti collection, a talk on growing cacti in Colorado gardens and a demonstration on repotting and cultivating these prickly plants indoors. Activities will begin at 10:00 a.m.

There will be no charge or preregistration to attend any of the lectures or tours. Seating may be limited, however, so make plans to arrive early and spend several educational, enjoyable hours discovering helpful, fascinating information about these members of the plant kingdom.

For more information about this or other current events at the Gardens, call 331-4010.

Gardening Volunteers Needed Outdoors Spring through Fall

The outside gardening staff needs enthusiastic volunteers to assist in the installation and care of their plantings throughout the gardens. If you enjoy planting, weeding and pruning and would like to work from 8:30 to

11:30 a.m., join them any Tuesday or Wednesday beginning April 11. They will meet in the blue and tan service building located west of the service entrance at 11th Avenue and Gaylord Street. (Do not enter through this entrance, but instead use the York Street entrance.) Please wear appropriate gardening clothes and bring gloves, hand pruners and a trowel for your use.

April and May Gardening Activities:

Weather permitting, you will be planting roses, perennials, annuals and vegetables and preparing each area for a successful season. The following Thursday of each week is scheduled as a rain date. Contact Joann Narverud at 331-4000 or Anne Bobal at 751-9078 for more information.

The Rock Alpine Garden needs help planting, weeding, trimming and seed collecting. If you have an interest in high mountain wildflowers, this is the place. They will be meeting in the Rock Alpine Garden on Wednesdays.

Note-taking skills and scientific curiosity are considered pluses in this garden. Contact Panayoti Kelaidis or Sandy Snyder at 331-4000 for more information.



Volunteer to help in the outdoor gardens during the spring and summer.

Emerson R. Birchfield on Shopping Lists

It's amazing—the most sane people I know all go a bit batty precisely on May 12 and 13, which coincide with “The Flowering of Denver,” the 40th annual Plant and Used Book Sale. The symptoms are obvious—carts overflowing, and spouses and children carrying pots and pots of flowers directed by the family gardener with the precision of a field marshal. I've witnessed near wrestling matches over the last peach-toned geranium. The rock alpine section has so many little treasures that shoppers must scurry like jackrabbits.

I, of course, am above all this. I know exactly what I'm after, and I shop exactly as I would in the supermarket—I make a list and stick to it. (In all honesty, the last time I went to the store for bread and eggs, I came home with bean dip, potholders and a simulated wood-grain recipe file and forgot the bread and eggs.)

On last year's plant list, I had 10 items. I figured I could get them into one cart, maneuver them easily onto the back seat, and plant them in one afternoon. I have no idea if I actually got those 10 items. All I know is that I considered renting a U-Haul and was on my knees planting for two weeks.

With that in mind, let me guide you through a few plants I might suggest for your shopping list. (It may also help to send \$2.00 to the Gardens to receive my handbook, a division-by-division guide to the plants we offer and their culture. Please mark your envelope to my attention.)

Upon entering the gates you will be faced with the enticements of Katie Dixon's patio department. It is a gardener with nerves of steel who can pass up moss baskets of pansies, which Katie says are ideal all-season bloomers on the terrace or in filtered sun. She hangs hers from trees near her patio where “they bloomed from plant sale 'til frost.” You can't miss the vibrant new balcon ivy-leaf geraniums, which are excellent in pots or massed plantings as a groundcover. They are tough, disease-resistant, and not bothered by the notorious geranium budworm.

Rosemary Laughlin's group pots up some fabulous combinations in wicker baskets (especially note the ones with stoneware handles and the new wildflower baskets). Inside John C. Mitchell II Hall, Sandy Sullivan's crew has assembled a diverse selection of houseplants. She may point out or the exotic bird-of-paradise, claiming, “It's a good candidate for summering out, and what a thrill when it blooms!” For heavenly indoors fragrance, she recommends bush jasmine, gardenia



and mock orange. Along with the ever-popular braided fig and natal plum, she offers lush hanging baskets of ivy, begonia and lipstick plant. Easy-care cacti and succulents from H. V. Rodman's division are a boon for the forgetful waterer.

While indoors, proceed to the DBG Gift Shop, which expands into the lobby for this event. Downstairs is the book division, chaired by Susan Coombe. After all, we hope your interests entail more than squishing slugs.

Back outside, annuals await. Joedy Arnold and Cari Adams have searched the world's seed companies for the newest and brightest, as well as charming old favorites. Joedy is happy about repeating the booths that feature annuals for specific purposes: cutting, fragrance, drying, old-fashioned garden, marigolds and the “Avant-Gardener,” where new varieties abound. Once again, separate colors will be available of statice, rhodanthe, verbena, larkspur, zinnia, snapdragon and many more. Cari is excited about offering the popular ‘Monstrosa’ strawflowers, vigorous four-footers that are great in the garden and even better for drying, and *Rhynchelytrum roseum*, ruby grass. She says, “Used fresh, it really puts a zing in summer bouquets.”

The devoted water-plant aficionado usually makes a beeline for Darlene Thomas' division. She offers hardy water lilies and bog plants at unbelievably low prices. Her enthusiasm and knowledge is a great help to beginning and experienced enthusiasts.

The summer bulbs division, chaired by Sheila Stephens, is always full of promise, neatly packaged in bulb form. Due to the overwhelming response to the Asiatic hybrids, she now offers lilies to provide a season-long succession of bloom in a variety of colors and heights. In June and July, enjoy salmon ‘Daytona,’ pink ‘Cherised,’ and peach ‘Daphne,’ as well as deep red ‘Corina’ and yellow ‘Dreamland.’ In August, the trumpet lily ‘Black Dragon’ will release intoxicating perfume throughout your garden. In late summer and fall, the Oriental hybrids steal the show, with white ‘Casablanca’ and rosy ‘Star Gazer’ followed by the red rubrum ‘Uchida.’ All three respond to peaty soil and thrive in filtered shade, and two-foot ‘Star Gazer’ is ideal for container growing.

John Reber's perennial division also offers top-notch flowers for shade and semi-shade that are rarely found in commerce here. Among them are feathery-plumed *Astilbe x Arendsii*, bronze-leaf *Heuchera* ‘Palace Purple,’ creamy-spined *Cimicifuga racemosa*, and ethereal *Aruncus dioicus*, a refined plant deserving a far more dignified common name than goatsbeard. Enough can't be said about the *Ligularia* clan. ‘Desdemona’ features broad burgundy-tinted leaves and golden flower heads, while ‘The Rocket’ erupts in dramatic spires of pure yellow.

It's almost unfair of me to mention some of the unusual perennials, since quantities are very limited. *Paeonia tenuifolia*, the fern-leaf peony, is a rare treasure. In covered wagons, this gem was carried by pioneers to new homes



The “Flowering of Denver” Pre-Sale Party is a great way to shop.

on the prairies, where some still survive. Double crimson flowers adorn delicate ferny foliage, and the contrast in form creates one of the most appealing flowers ever to grace a garden. The fern-leaf peony is difficult to propagate and therefore about as scarce as hen's teeth, so you must forgive a rather high price tag. So also for our few tree peonies, woody shrubs reaching four or five feet in 10 years with as many as 100 blossoms. To my mind, their crepe-like flowers often eight inches across, are unrivaled. The colors are exquisite; when my tree peony blooms during May in the softest pink, like the color of a flower girl's ribbon, I would gladly sell my wife for a few more.

(Emerson R. Birchfield is our special correspondent for "The Flowering of Denver." He is a connoisseur of rare and unusual plants and a valued customer at the Plant and Used Book Sale. We are happy to report that as of this writing, Mrs. Birchfield had not yet initiated divorce proceedings.)

From Your 1989 Plant and Used Book Sale Chairman

"The Flowering of Denver" is little more than a month away—May 12 and 13, to be precise. These two days immediately preceeding Mother's Day find every nook and cranny of the Gardens, inside and out, filled to overflowing with the best in annuals, perennials, houseplants, and garden ornaments and accessories.

The Pre-Sale Party kicks off the festivities on Thursday, May 11, from 5 to 8 p.m. Besides being a grand garden party, it's an opportunity to peruse the cream of the crop. Partygoers may shop unhurriedly throughout the Gardens, aided by personal shoppers and loading assistants. (Please note the book division will not be open during the party.)

Party chairman Janet Ellis has created a lovely scenario for a spring evening including elegant hors d'oeuvres, the chamber music of the Botticelli String Quartet and a drawing. One lucky patron will win a rose garden. Betty Lou Roberts has selected 10 of the most breathtaking roses, and we will provide design and planting assistance to the winner. Tickets for the Pre-Sale Party are \$40 per person. By returning the registration form on the insert in this newsletter, you will be automatically entered into the drawing for the rose garden.

"The Flowering of Denver" officially opens on Friday and runs from 9:30 a.m. to 5:00 p.m. both days. To aid our valued customers in their shopping we have compiled a handbook, edited by our own Emerson R. Birchfield. It features the plants offered in every

division, as well as their cultural requirements. To receive your copy of "Emerson's Handbook," please remit \$2 to DBG, 909 York Street, Denver, CO 80206. Please mark your envelope ATTN: Emerson R. Birchfield, and your copy will be mailed to you promptly. Make checks payable to Denver Botanic Gardens. The handbook will also feature a schedule of the many children's activities, educational demonstrations and entertainment throughout the course of the sale.

The success of "The Flowering of Denver" rests on the shoulders of our volunteers. If you would like to join their growing ranks, make plans to attend the Volunteer Fair on April 22 in John C. Mitchell II Hall at 9 a.m. Our division chairmen will share exciting new introductions and familiarize new and seasoned recruits with the layout and logistics of the sale. As a volunteer you may shop as a preferred customer on Thursday from 3 to 5 p.m. Please contact Karen Cuda at 331-4000, extension 48, if you would like to be a volunteer.

Rob Proctor
1989 Chairman of
"The Flowering of Denver"

Phlox—The Lecture and the Sale Item

On Wednesday, April 19, the Rock Alpine Garden Booth for the Denver Botanic Gardens Plant and Used Book Sale and the Rocky Mountain Chapter of the American Rock Garden Society will co-sponsor a preview of a plant sale item and present an illustrated lecture. "Phlox: An Overview of the Family" will be presented at 7:30 p.m. in John C. Mitchell II Hall. Professor Dieter Wilkin will share an overview of his lifetime's work on the phlox family, which happens to be a family featured at the plant sale in May.

Dr. Wilkin is a professor in the botany section of the Biology Department at Colorado State University in Fort Collins. He has acted as curator of the Herbarium there since 1973. He has also carried on an active research program centered primarily on the phlox family during his professional career. He has sought members of this family throughout the West, and researched their chemistry and taxonomic relationships, particularly members of the genera *Ipomopsis* and *Collomia*.

The public is invited to attend and there is no charge for this special evening.





Plant Life Field Trip: Roxborough State Park

(one session)

Wednesday, April 19
9 a.m. to 3 p.m.

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geologic formations where a wide variety of habitats will be explored, including sunny open hillsides, hogback ridges and a moist stream valley.

Please come prepared with drinking water, a snack, sensible water-proof walking shoes and a jacket.

Leader: Peter Root is an amateur botanist who volunteers regularly at the Kathryn Kalmbach Herbarium at DBG; he is also a volunteer naturalist at Roxborough State Park.

Meet: at 9 a.m. at the Visitor Center inside Roxborough State Park. Each car entering the park must purchase a daily user pass at \$3 in addition to the field trip fee. Roxborough State Park is located at Roxborough and Rampart Roads.

Fee: \$2.50 members/\$3 non-members

Limit: 20

Tree Walk at Fairmount Cemetery, Denver

(one session)

Sunday, April 23 1:30 to 3:30 p.m.

During the summers of 1890 and 1891, over 4,000 trees including seven species of oaks, sycamores, silver maples, Kentucky coffee trees and pines were all planted at Fairmount Cemetery. This is an opportunity to

observe these as well as some more unusual trees such as scarlet oak and yellow buckeye.

A walk through these mature, historic specimens will sharpen your identification skills.

Instructor: Dr. William G. Gambill, Jr., Director Emeritus and taxonomist at DBG, is a former botany and biology professor.

Meet: promptly at 1:30 p.m. just inside the entrance of Fairmount Cemetery which is located at East Alameda and Quebec Streets in Denver.

Fee: \$7.50 members/\$8.25 non-members (includes \$3 for *Trail of Trees*, a 64-page illustrated guide to Fairmount Cemetery)

Botany for Beginners

(four sessions)

Tuesdays, May 17, 24, 31, June 7
7 to 9 p.m. Classroom B

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This is fundamental if you wish to know how to identify plants; it will also help you appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

Instructor: Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

Fee: \$32 members/\$35 non-members

Limit: 15

Wildflowers of the Plains Field Trip

Saturday, May 13
10 a.m. to 3 p.m.

This spring field trip at the edge of the plains at Plainview is an opportunity to see the spring flora of this area in its full glory. See the Rocky Mountain iris, orange arnica, western wallflower, bluemist penstemon, Easter daisy, spring-beauty, pasqueflower and many others.

Don't forget to bring your lunch and drinking water; if you have wildflower field guides and a hand lens, they would also be useful.

Meet: promptly at 10 a.m. at the junction of Highways 93 and 72 between Boulder and Golden in the parking lot at the southeast side of the intersection. Please call the education department if you have questions.

Instructor: Paul D. Kilburn, Ph.D., has taught botany and ecology in Illinois and Colorado for many years.

Fee: \$5 members/\$5.50 non-members

Herbs for Flavor

(three sessions)

Thursdays, April 6, 13, 20
7 to 9 p.m.

Morrison Center at Denver
Botanic Gardens

The attractive forms, colors and textures of the culinary herbs make them ideal garden plants, and nothing can compare with their freshly harvested flavor.

Learn to plan an herb garden as well as to cultivate and harvest the



major cooking herbs.

In hands-on greenhouse sessions, participants will propagate a variety of herbs from seeds and cuttings to take home for their own gardens.

Instructor: DBG Education Director Pat Pachuta is a horticulturist who combines her enthusiastic interests in gardening and cooking by growing herbs.

Fee: \$30 members/\$33 non-members (includes \$6 for materials)

Limit: 15

Water Gardening for Colorado

(two sessions)

Thursdays, April 6, 13

7 to 9 p.m.

Classroom B

With such diverse plants as the smallest flowering plant in the world (*Wolffia* sp.), and the giant water lily (*Victoria* sp.), the world of aquatic plants offers excitement to both professional gardeners and amateurs.

The content of this how-to course includes: water gardening history; pool design and construction; variety selection, cultivation, and display; hardy and tropical bog plants; half-barrel displays; the culture of the *Victoria* water lily and lotus, as well as floating plants; sources of plant material and special problems.

Through slide presentations, demonstrations and discussions, learn to incorporate these unusual plants into your home and landscape.

Instructor: A Gardener-Florist II at

Denver Botanic Gardens, Joseph V. Tomocik maintains our Aquatic Plant Display and enjoys sharing his enthusiasm for these "wet wonders" of the plant kingdom with others.

Fee: \$16 members/\$17.50 non-members

Mushroom Identification

(two sessions)

Saturdays, June 3, 10

Classroom C

8:30 a.m. to 12:30 p.m. and optional field trip from 1:30 to 3:30 p.m.

This course will present mushroom identification for beginners and will provide a base for those who may wish to pursue the subject in more depth in the future.

Spring-fruiting mushrooms of the city as well as the summer fruiting species of the high country will be covered.

Two slide-lecture sessions cover structure, growth, habitat, seasonality, toxicity and edibility of mushrooms. The use of field guides and keys will be demonstrated and recommendations will be given on those most useful in our area. Recommended field guides will be available for purchase.

Handouts will be distributed but students should be prepared to take additional notes. Participants will learn to positively identify more than 20 common edible, non-edible and poisonous mushrooms in addition to helpful collecting, cleaning, preparation and cooking hints.

An optional field trip to areas near

the Gardens will be scheduled in the afternoon of each session.

Those planning to attend the field trips should bring a sack lunch. Prospective students should be on the lookout for early mushrooms and may bring them to class for identification.

Instructor: Marilyn Shaw lectures and teaches extensively and has been active in the Colorado Mycological Society for 16 years. Ms. Shaw is a consultant in mushroom identification for DBG and the Rocky Mountain Poison Center.

Fee: \$32 members/\$35 non-members

Japanese Tea Ceremony

Section I: Saturday, April 22

Section II: Sunday, April 30

Section III: Sunday, May 14

Section IV: Saturday, May 20

(one session) 2 to 3 p.m.

Tea House in DBG's Japanese Garden

Please indicate your section on the registration form.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

Fee: \$4.50 members/\$5 non-members

Limit: 15

Basketry Workshop: Pine Needle-Raffia Ornament

(one session)

Saturday, April 29

9 a.m. to 3:30 p.m.

Classroom B

Experience the delightful craft of making delicate lacelike pine needle-raffia ornaments. Each student will learn the basic techniques of this type of basketry and should be able to complete one ornament or trivet during this workshop. The finished work can be hung now to grace your home or can be tucked away until the holidays.

Written instructions and illustrations for three ornament designs will be provided. Variations on the design and student innovation, however, is highly encouraged. Don't forget your scissors and a sack lunch and beverage; all other supplies will be provided.

Instructor: Debbie McClelland

Fee: \$26.50 members/\$29 non-members (includes \$2 for materials)

Limit: 10

*Facing page:
As always, a perennial favorite of spring, the pasqueflower.*

This page:

Learn what plants will grow well in Colorado water gardens in Joe Tomocik's class.



Basketry Techniques: Pine Needle-Raffia

(three sessions)

Section I: Mondays, April 10,* 17, 24

Section II: Tuesdays, May 9,* 16, 23

**6 to 8:30 p.m. except April 10* and May 9* when the class ends at 9 p.m.
Morrison Center at Denver Botanic Gardens**

Please indicate your section on the registration form.

This elegant style of basket is constructed through a coiling technique using long-leaf pine needles and raffia. Suitable pine needles, from 6-18 inches long, are found on the West Coast, in the Great Lakes region and on the southeastern Gulf Coast. Natural raffia is used for the stitching and intricately woven patterns.

With homework, each student can expect to complete a modest-sized basket designed specifically for this class. Variations on the design or individually designed baskets, however, are highly encouraged.

Beginners and experienced basket-makers are all welcome. Don't forget your scissors; all other materials will be provided.

Instructor: Debbie McClelland studied art education at Eastern Michigan University and has conducted many classes and demonstrations that showcase her expertise in this revived Civil War art.

Fee: \$36 members/\$39 non-members (includes a \$4 materials fee)

Limit: 10 per section

Calligraphy: Beginning Italic

(six sessions)

Tuesdays, April 11, 18, 25, May 2, 9, 16

1 to 3 p.m. Classroom B

This introductory course is designed to teach students basic letter forms of the Italic alphabet, the use of proper materials, color and simple design.

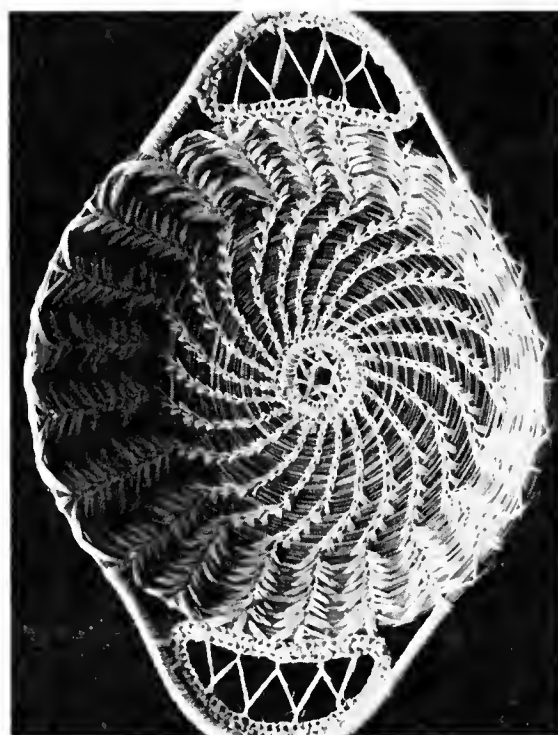
This is an excellent course for creating a solid foundation in calligraphy.

Please remember to bring to the first class: drawing board (at least 16 by 20 inches), a black fine point marker, pencil, eraser, ruler (18 or 24 inches) and masking tape. There will be a \$5 materials fee, payable to the instructor, at the first class.

Instructor: Alicia McKim studied art at Western State College and is a freelance calligrapher whose work is exhibited widely.

Fee: \$48 member/\$53 non-members, in addition to the \$5 materials fee that will be collected at the first meeting.

Limit: 12



Beginning Ikebana Lessons

(four sessions)

Saturdays, April 1, 8, 15, 22

9:30 to 11:30 a.m.

Classroom B

In this introductory course, students will view slides and gain a preliminary understanding of four schools of arranging: Ikenobo, Chiko, Ohara and Sogetsu. They will practice and take home beginning styles of light, airy arrangements using spring flowers

such as irises and pussy willows.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water) and notebook.

Although flowers will be provided, students should bring their own line material (branches) cut from their yards.

Instructor: Joan Wooldridge is past president of Ikebana International and has teacher's certificates in two schools.

Fee: \$44 members/\$47 non-members (includes \$12 for flowers)

Limit: 12

Advanced Ikebana Workshop

(one session)

Saturday, April 29

9:30 to 11:30 a.m.

Morrison Center at Denver Botanic Gardens

This workshop is for students who have already had some instruction in ikebana and are interested in continuing their lessons.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water), tall (ten inches or more) container for nageire and notebook.

Students should also bring their own line material and flowers.

Instructor: Joan Wooldridge

Fee: \$8 members/\$9 non-members

Limit: 12

**Denver Botanic Gardens
909 York Street
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No



LIBRARY

Helen Fowler Library
Volume 12, No. 2
April 1989
Librarian:
Solange Gignac

Next covered is the pepper, one of the vegetables from the Western Hemisphere that found wide distribution into the rest of the world by the early 1500s. Hot peppers, or chilies as we prefer to say here in the West, contain a substance known as capsaicins. It's the same ingredient that can give the neophyte chili eater that heart-stopping, eye-watering encounter of the worst kind.

Capsaicins are so powerful, according to the author, that a dilute solution of one part capsaicin to one million parts water can be easily detected on the human palate.

Mail carriers and joggers carry aerosol cans that contain a solution of capsaicins to ward off unfriendly dogs. Most of this potent chemical is contained in the inner cross walls or septa of the chili fruit that holds the seeds. So to moderate the chili's heat, the author's advice is to remove the seeds and septa.

Ms. Rupp reports the probable origin of the modern chili dish, as observed by a 16th-century Spaniard in Mexico, with the following quote: They consume "frog with green chillis, newt with yellow chilli, tadpoles with small chillis, maguey grubs with a sauce of small chillis [and] lobster with red chilli, tomatoes and ground squash seeds." Try telling that to a Texan today!

It's hard to believe that potatoes were once unpopular and actually viewed with contempt. The author tells the story about a gift of potatoes given by Sir Walter Raleigh to Queen Elizabeth. The Queen's cooks, "uneducated in the matter of potatoes, tossed out the lumpy-looking tubers and brought to royal table a dish of boiled stems and leaves, which promptly made everyone deathly ill." As a consequence, potatoes were banned from court and several centuries passed before they managed to be accepted on a broad scale.

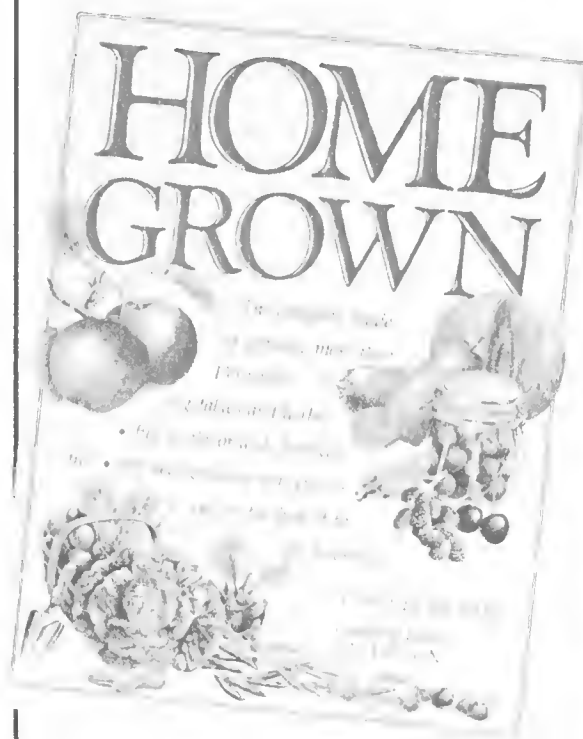
New World beans were utilized before 8000 B.C. and are grown throughout the world today. China is now the top producer of European fava beans; the United States the top producer of Asiatic soybeans; and Africa the top producer of South American lima beans.

Succeeding chapters deal with lettuce, celery, carrot, radish, cabbage and cauliflower, turnip and beet, spinach and onion. We learn that during the U.S. Civil War, the Union Army routinely used onion juice to clean gunshot wounds and boiled onion juice was said to make a dandy polish for gold-leaf picture frames.

The book, 222 pages, illustrated by turn-of-the-century line drawings, includes works on vegetables and vegetable gardening.

This is a refreshingly readable book. Whether vegetable gardener or vegetable enjoyer, you will find this well-written and informative book hard to put down once in hand.

O.L. "Olie" Webb
Environmental Consultant



Home Grown

By Denys DeSaulles. Houghton Mifflin, Boston, 1988. \$35.00. SB 324 D 1988

Now is the time to read this book. Before you thumb through seed catalogs, putting together an ambitious order, turn to the illustration captioned "digging without strain," on page 35 or, my favorite, "use a crowbar to form individual planting holes for parsnips on stony grounds," on page 154.

This book tells how to grow virtually every edible plant from the usual standbys to Florence fennel and Cape gooseberries (*Physalis peruviana edulis*). Basic information is given on soil cultivation, watering and chemical-free pest control, followed by specific instructions for the fruit garden, the vegetable garden and the salad and herb gardens. Detailed descriptions of recommended varieties are given. Notes comparing the eating habits of European, British and American gardeners precede many sections, giving an interesting, cosmopolitan tone to the book.

Accompanying each section are several pages of graceful watercolors depicting the varieties. While they make a lovely addition to the book, I found a page full of, for example, strawberry varieties not very useful: All four look identical. Lacking are the small arrows pointing out distinguishing features that the publishers use in their Peterson field guide series, the possible inspiration for the present volume. But lacking too is the morphological variation making the arrows helpful.

continued on page 10

Blue Corn & Square Tomatoes

By Rebecca Rupp. Storey Communications, Inc., Pownal, VT., 1987. \$9.95. SB 320.9 R8 1987

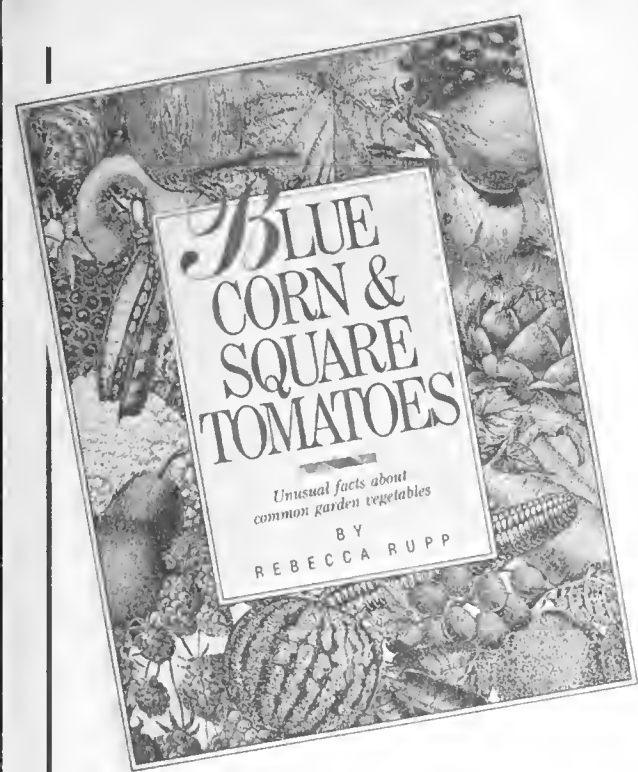
With a title this intriguing, what gardener could resist reading further? The reader will be rewarded by an excellent historical and biological review of the origins of many of our common garden vegetables. The author holds a doctorate in biology and is a freelance writer.

While the origin of plants has been covered in detail in many other works, none can match this book for its combination of entertaining details and witty writing style.

The introductory chapter provides a succinct history of vegetarianism and the rise in popularity of vegetables in our diet over the years. The succeeding chapters deal with specific vegetables and interesting facts and anecdotes about them that, to my knowledge, are not covered well in any other work.

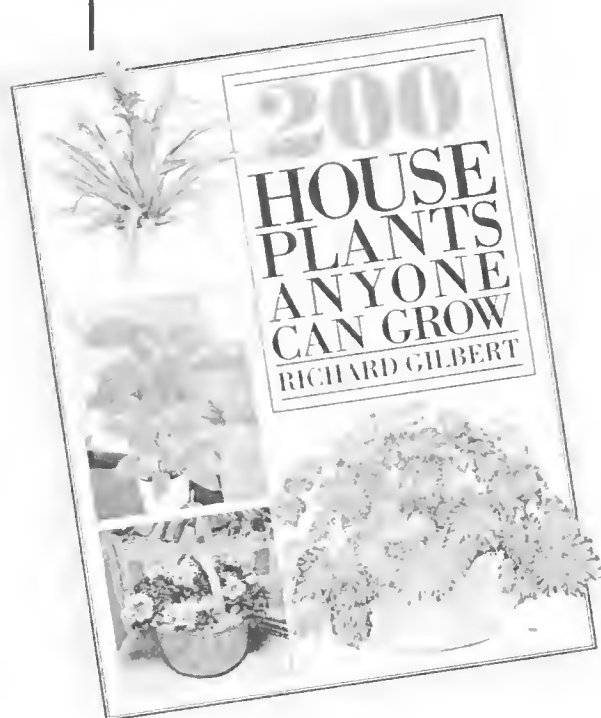
The now ubiquitous tomato leads the list. We learn of the reluctance for years of people to accept it as a useful table vegetable. Like most other members of the potato family, the leafy vegetation and stems are poisonous to some extent. Hence a suspicion lasted for generations about the edibility of the tomato, potato and eggplant.

Some 500 tomato cultivars are on the market today. These range from the Siberia tomato that sets fruit at 38 degrees and produces ripe fruit in 48 to 50 days, to the King Humbert tomato that is nearly square in cross-section (developed presumably to fit into packing crates with little waste of space). Then there is the Galápagos tomato that can tolerate salt spray and the Peruvian variety found to exist in the fog belt of the western Peruvian desert where fog is its only source of water.



The overall impression of the abundant illustrations is a storybook garden, reflecting the book's British origin and the labor-intensive methods it blithely advocates throughout. But even following this advice would not necessarily help the Rocky Mountain gardener. The compost in your airy bin would refuse to rot and would disappear with the first chinook. The pest control section failed the acid test: Grasshoppers do not rate even a passing reference. But overall, this is a highly useful book. Reading it will stimulate your palate and make you feel connected to gardeners on two continents.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder



200 Houseplants Anyone Can Grow

**By Richard Gilbert. HP Books,
Los Angeles, 1988. \$10.95.
SB 419.G5 1988**

Plants in this book aren't really plants but part of the decor, a statement about your lifestyle. Each plant description includes a box containing a decorating tip. The accompanying photo contains an oriental rug here and a snuff box there. Humble clay or plastic pots are never exposed but always hidden inside rustic baskets or colorful ceramic pots. Plants are



arranged alphabetically by genus but family and native habitat are rarely mentioned. It is as though these plants were created by a clever designer.

At the peak of my fury over this insult to my plantsmanship, I suddenly realized that my own indoor gardening had been reduced to exactly this decorative purpose. I grow only the most mundane plants and discard, albeit guiltily, primroses and cyclamens, as recommended here, when they finish blooming. My plants usually look scraggly and pest-ridden. At least the plants in this book are fighting fit, possibly due to liberal amounts of the recommended pesticides.

When I faced my own suspect motives, I realized that houseplants on my high-rise windowsill 20 years ago brought me to my present love of outdoor gardening. Through them and Thalassa Cruso's *Making Things Grow* I learned basic gardening principles. That timeless book made me aware of the need to learn the origins of plants, fueling my impatience with the present volume. But in fact, this is an excellent introduction to indoor gardening. Not only does it include succinct instructions for each plant but also an appendix with line drawings illustrating cultural practices and propagation techniques. These make it the good start for the future gardener.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder

Library Open on Sundays Again!

Sunday hours for the library have been reinstated. Thanks to funds available from the Scientific and Cultural Facilities District, the Helen Fowler Library will be open every day of the week from 10 a.m. to 4 p.m.

Jennine Regas, M.S.L.S., is the new assistant librarian. Volunteers help daily in the library allowing it to provide a broader range of services. Sunday volunteers are currently being sought and, should you be interested, call either of the librarians at 331-4000, extension 32.

Additionally, the annual Plant and Used Book Sale will be held May 12 and 13, with the bag sale on Sunday afternoon, May 14. Book and stamp donations can now be brought to the library on Sundays as well as the other days of the week. Please bring them at your earliest convenience so that the items may all be processed by sale time.

The Green Garden: The Art of Foliage Planting

**By Lys de Bray. Salem House,
Topsfield, Massachusetts, 1988.
\$14.95. SB 431.D4 1988**

One day, perhaps in the not too distant future, the texts of all gardening books will be stored in some master computer. The master editor will take a British book such as this one, packed with plant lists, and command the computer to produce a Rocky Mountain version. Every mention of holly (*Ilex*) will be converted to holly (*Mahonia*), yew will become juniper and lacy ferns will translate to *Gypsophila*. Until then, or until some enterprising local botanical whiz produces a pocket converter, these books will have limited specific usefulness.

Despite the fact that this is clearly a British book, general principles are given for gardeners who have passed the stage of just trying to keep things alive and are actively designing their gardens. The underlying theme is that contrast is always desirable, in form (spiky with round) and in color (purple with yellow). Variegated leaves crop up everywhere, but color in the form of flowers must be avoided. The ultimate goal is a "restful" garden for the "lazy" gardener. The ultimate effect is a highly artificial, lifeless environment with no forage for bees, butterflies or birds, but lacking the serenity of a Japanese garden. All the contrast produces a frenetic landscape. Nevertheless, the photographs are excellent and contrast does work to highlight features of individual plants, a worthwhile achievement in itself.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder



Gardening: April is a Time for Planting

From January through March, we have been planning, ordering, pruning, preparing and doing some planting. But in April the rush is on and the real thrust of gardening begins. Everything left undone or incomplete the past months becomes a job to accomplish now, in addition to the tasks planned for April. Along with this, the gardener must dodge the fickleness of nature and the erratic conditions of rain, snow, wind and sunshine.

If March did not allow for the application of dormant oils, early April can, as long as the buds are still tight. However, as the month progresses, water will begin to move through the plant and buds will swell. Lilacs, crab-apples and pears will break bud and many will come into bloom. Using dormant oils at this time may damage new spring growth, so apply with caution.

As we are all aware, there are certain temperatures that make it easier for people to function. Plants also function best within a certain temperature range. Those plants considered "cool season" have an optimum growing range of 70 to 85 degrees. Those considered "warm season" have an optimum growing range of 85 to 98 degrees. This optimum range is determined by what stage of development the plant is in (seedling or fruiting stage, for example).

Because gardeners grow plants beyond their natural temperature range, cold or heat injury is often a hazard to plant performance. Consequently, forsythia may not bloom in April and lettuce may be limp in June.

Moisture is a major factor of growth and in itself is a growth regulator. The most critical period for water is at the time in which cell division is most rapid. Without adequate water during planting or transplanting, the plant could be stunted, desiccated or may even die.

Light is also a factor in plant growth. It affects germination in some plants, flowering time in others and stem and sturdiness in still others. As important as it is to plant in April, planting too early may be harmful. This is true for many warm season crops planted too hastily. The stems become stunted, do not branch and plants often die, later, usually in July leaving large empty spaces in your garden at a time when replacement crops are not likely to succeed.

Another April activity in which timing is important is transplanting. In this, plants and people have much in common.

When plants are transplanted from one location to another, their roots are severed and ties are broken. The physiological processes are inter-



April is an important planting time.

rupted and the plants are set back or actually put into a state of decline. The environments to which they are moved offer new exposures, soil types and changes in competition. The younger plants have more vigor and establish more quickly.

When is the best time to relocate? People find it easiest when something has been completed or prior to the start of something new.

Plants also adjust best under these same conditions. Relocating is less stressful in the late summer or early fall after completion of the season's growth or several weeks prior to the onset of new growth in the spring. Other development is not occurring at these times and energies can be channeled more directly into the establishment of new roots.

When people relocate, they usually do so to better or equal their previous living conditions. The elementary physiological needs—air, food and water—all must be met for survival. When plants are relocated, these same simple needs must be met for survival. Without an environment conducive to renewed growth and development, plants rely on what was stored. If this savings is not replenished and is eventually depleted, the plant will die. A loosened soil with adequate drainage and room to grow allows the plant to develop.

In order to understand where the best places for relocation are we can continue to use the analogy of plants, people and transplanting. When people relocate, a great deal of thought and maybe some investigation occurs before a move is made so that the new area of residence will, hopefully, provide the best opportunity for full development. A new residence for plants

should accomplish the same goal. Unfortunately, we do not always give them the same considerations. We forget that plants also go through stages of development and that while they may start out small, they will mature into larger specimens and rapidly outgrow their residence.

Plants, for some reason, are a mystery. Although they are recognized as living entities, they are too often not treated as such. When we compare human needs to optimum survival and extract some of those basic requirements for plants, then the mystery is solved and the caring becomes easy.

Gayle Weinstein
Botanist-Horticulturist at
Denver Botanic Gardens

Plant Ad

If you have ever looked for an unusual plant, unable to find it no matter how many stores and catalogs you've searched, then this new column is for you. Beginning with this issue of the newsletter, plant searches for the hard-to-find will be conducted through this plant ad.

Call Librarian Solange G. Gignac at 331-4000, extension 32, if you are unable to locate a plant through other means. An announcement, or plant ad, will be placed in this column for all to read. This new membership benefit may become an easy solution for your search. If anyone has information leading to the acquisition of the plant, call the librarian.

David Freeman is searching for sources of the following daylilies hybridized by Lemoyne Bechtold: Colorado Gold, Denver and Belmar.

A library patron is searching for seeds of *Anastatica hierochuntica*, commonly called rose-of-Jericho or resurrection plant.

CAL E N D A R

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

*First meeting of a class with more than one session

2

9

16

23

30

Tree Walk at Fairmount Cemetery, Denver

M

3

10

17

24

Coming Next Month

May 1
Free Day at Denver Botanic Gardens

T

4

11

18

25

May 11
Pre-Sale Party

W

5

12

19

26

May 12-13
Plant and Used Book Sale

May 16
A Day of Discovery

D

T

6

13

20

27

May 17
Botany for Beginners*

May 20-21
Ikebana International Show

A

F

7

14

21

28

May 28-29
Denver Rose Society: Old Garden Roses Workshop and Show

R

S

1

Rose Symposium, Beginning Ikebana*

8

15

22

Plant and Used Book Sale Volunteer Training

29

Basketry Workshop: Pine Needle-Raffia Ornament, Advanced Ikebana

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE

April 1989



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A Summer Program "Just for Kids"

A "Small-Fry Safari" will take three and four year-old children on a discovery visit of the Gardens this summer while older children will see the "Wild and Woolly" and learn about "The Land of the Lotus."

A summer full of fun activities for children between the ages of three and 11 has been prepared with the first beginning June 26. All classes meet at the Gardens Mondays through Thursdays. This is anticipated to be a popular program and early registration is encouraged.

Plan now to let your children discover the Gardens. Let them visit a green zoo, hunt for beastly plants, see the flowers that delighted cowboys and much more. Registration details and complete descriptions are included in the "Just for Kids" section of this newsletter.

Green Thumb



NEWS

Denver Botanic Gardens

May 1989

Number 89-5

"The Flowering of Denver"—The 1989 Plant and Used Book Sale is Here!

"The Flowering of Denver" is the place to be when the 40th Plant and Used Book Sale gets underway on May 12 and 13, and the Pre-Sale Party begins Thursday, May 11, at 5 p.m. The sale is open from 9:30 a.m. until 5:30 p.m. on Friday and Saturday, and there is no admission charge during the sale. According to 1989 chairman Rob Proctor, "The sale strives to promote gardening for all ages and all seasons. This event has become a region-wide celebration in the most beautiful marketplace imaginable—the Gardens."

The Pre-Sale Party is one of the most eagerly anticipated events of spring. Partygoers may shop unhurriedly and enjoy a delicious buffet by Panache while listening to the music of the Botticelli String Quartet. Reservations, at \$40 per person, are a must. According to party chairman Janet Ellis, there are only a few left, and they may be obtained by contacting the DBG Development Office at 331-4000. One lucky patron will win a special rose garden.

Plant selections are exciting and varied—just ask Emerson R. Birchfield, the special plant sale correspondent. He has compiled a handbook that lists each division's plant selections and cultural instructions. The booklet may be obtained at the sale for \$2 to assist customers with planting and caring for their purchases.

New members who join during the sale will receive a \$5 coupon good toward their plant or book purchases. The eye-catching 1989 poster, with artwork by Paula Nicholas and design by Shari Jones and Mike Eagleton, will be sold in the Gift Shop.

continued on page 4



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Audience
Concerts
page 3*

*More on Plant
and Used
Book Sale
page 4*

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Photography
Lecture and
Workshop
page 6*

*Just for Kids
page 8*

More than 200 different irises will bloom in the Rock Alpine Garden this spring.



Day of Discovery: Rock Gardening

This month's Day of Discovery, Tuesday, the 16th, will immerse you in rock gardening.

At 10:00 a.m. Sandy Snyder, former president of the Rocky Mountain Chapter of the American Rock Gardening Society, will talk in Classroom C on "Dwarf Bulbs in the Rock Garden." Ms. Snyder is also a horticulturalist in Denver Botanic Gardens' Rock Alpine Garden and has made the minor bulbs one of her specialties.

At 11:30 Robert Heapes, current president of the rock gardening chapter and a national lecturer on wildflowers, will present a slide show in John C. Mitchell II Hall.

Throughout the morning volunteers will be in the Rock Alpine Garden to answer questions and direct visitors to special blossoms. The Gardens' outstanding collection of phloxes will be in full bloom to give you a taste of the mountains before summer begins.

There is no charge nor preregistration for Day of Discovery lectures, but seating is limited. For more information about this Day of Discovering Rock Gardening, call the Gardens at 331-4000, extension 44.

Chatfield Day for Members Only

Mark your calendars now for the second annual Members' Day at Chatfield Arboretum.

A nature trail winds through the riparian community. You can stand next to the old schoolhouse and look out over the plains to the east or look over your shoulder to enjoy the view of the nearby foothills.

On Sunday, July 16, from 4 to 8 p.m., take a picnic supper (and some

meat to grill), your lawn chairs and wear your straw hat and jeans to Chatfield Arboretum. A large grill full of glowing coals will be available to you and your fellow members, as well as beverages and cake. Guided tours will be offered or you can explore on the easy hiking trails. You might even want to take a hay ride around the area! Entertainment will be provided.

Watch your June *Green Thumb News* for your reservation form and send it in early. This was a very successful event last year and we expect another sellout crowd.

Tributes

In honor of Mr. & Mrs. Bob Eichberg

Mr. & Mrs. Robert Appel

In honor of Jane Silverstein Ries

Edward & Ann Levy

In honor of Mr. & Mrs. Joseph Silversmith

Mr. & Mrs. Robert Appel

In memory of John Barnes

Jack & Nan Deter

In memory of Claudia Shelbert Cohn

Bob & Becky Holman

In memory of Marie Connors

Mr. & Mrs. John Fleming Kelly

In memory of Ruth Patton Hubner

Bob & Becky Holman

In memory of Kent Hutton

Mr. & Mrs. Ralph Rauscher

In memory of Roberta McDougal

Constance Crocker

In memory of Florence Miller

Ole & Liv Wilmann

In memory of Frances P. Sargeant

Nancy N. Davis

In memory of Mrs. Samuel S. Sherman, Jr.

Mr. & Mrs. John C. Mitchell II

In memory of Mrs. Georgia Sayler

Mary Lou Kidder

Green Thumb News

Number 89-5 May 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than April 20 for June, May 19 for July and June 20 for August.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, extension 20, for details.



TICKETS

It's going to be easier than ever to purchase tickets this summer. Ticket prices vary by concert and are listed here with each concert description. You may order by mail using the coupon in this brochure, purchase tickets by phone, or pick them up at outlets as in the past. Tickets will be sold at outlets one concert at a time. All sales are first come, first serve.

ORDERING BY MAIL

Please read the concert information and the order coupon carefully. Incomplete, or incorrect orders will be returned to sender. If you take advantage of member discounted ticket prices, please make sure that you are a current member of either KCFR or the Denver Botanic Gardens (your expiration date is listed on your membership card). Checks, Money Orders, or Credit Charges (Visa, MasterCard, American Express). Please do not mail cash. **There is a \$.75 per/ticket non-refundable service charge. MAIL ORDERS MUST BE RECEIVED NO LATER THAN JUNE 14.**

ORDERING BY PHONE

All concerts will be available by phone this summer at **744-9999**. If you wish to take advantage of member discounted ticket prices, please have your membership card ready when you call (you must use the exact name on the card and know the expiration date). KCFR members can expedite phone sales by having their membership number ready. Visa, MasterCard, and American Express. **There is a \$.75 per/ticket non-refundable service charge. ALL CONCERTS GO ON SALE BY PHONE STARTING JUNE 5. PHONE SALE HOURS: MONDAY-FRIDAY, NOON TO 6:00 P.M. PHONE SALE NUMBER: 744-9999.**

OUTLET SALES

Tickets will be available at a variety of outlets throughout the metro area one concert at a time. Even for the most popular concerts we will reserve a limited number of tickets for outlet sales. Starting date for outlet sales for each concert is listed with the concert descriptions elsewhere in this brochure. Checks (payable to KCFR/DBG) or Cash only. **There will be a flat \$1.00 per/transaction service charge for each sale at all outlets*.**

Denver Botanic Gardens

909 York St. (the house at 9th & York).
Monday-Friday, 8:00 a.m. to 5:00 p.m.

KCFR Studios

2249 S. Josephine St.
Monday-Friday, 8:00 a.m. to 5:00 p.m.

ListenUp Disc Connection

515 E. Exposition, Denver
Monday-Friday, 10:00 a.m. to 8:00 p.m.
Saturday, 10:00 a.m. to 6:00 p.m.
Sunday, 11:00 a.m. to 5:00 p.m.

ListenUp Disc Connection

3216 Arapahoe, Boulder
Monday-Friday, 10:00 a.m. to 8:00 p.m.
Saturday, 10:00 a.m. to 6:00 p.m.
Sunday, 11:00 a.m. to 5:00 p.m.

The Ticket Bus*

16th & Curtis, downtown
Monday-Friday, 10:00 a.m. to 6:00 p.m.
Saturday, 11:00 a.m. to 3:00 p.m.

(* *The Ticket Bus will charge their standard non-refundable per/ticket service charge on all sales.*)

1989 ListenUp Garden Concerts Information: **744-9999**

c/o KCFR-FM
2249 S. Josephine Street
Denver, CO 80210

GARDEN
CONCERTS

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1989 ListenUp Garden Concerts - 744-9999

A great summer of music is ready to go! With a new name, a new sponsor and easier more convenient ways to purchase your tickets.

As in the past, the concerts have been created for your enjoyment, and for the benefit of the Denver Botanic Gardens and public radio station KCFR-FM. This year, KCFR and the Gardens are pleased to announce a new partner and sponsor for the series: ListenUp Audio/Video.

Long known for their dedication to quality audio, and more recently, video reproduction, ListenUp has been an industry leader in consumer and professional audio/video equipment. ListenUp's reputation for innovative and state-of-the-art home, auto, and professional audio/video equipment make their sponsorship a perfect fit for the Garden Concerts. Their Disc Connection compact disc stores will also serve as ticket outlets this summer.

GATES OPEN 90 MINUTES BEFORE SHOWTIME

Thursday, June 22 at 7:30 p.m.

Friday, June 23 at 7:30 p.m.

THE PARAGON RAGTIME ORCHESTRA

(Raindate: Saturday, June 24 at 10:00 a.m.)

Tickets: \$7.00 each (Member price: \$5.00)

(On sale at outlets starting June 5)

The Paragon Ragtime Orchestra is a 14 piece ensemble of Juilliard trained musicians who recreate the popular music of turn of the century America. Two great evenings of authentic Americana drawn from the original manuscripts of legendary band leader Arthur Pryor. Get out your straw "boater" for these fun openers to the 1989 season.

Thursday, July 6 at 7:30 p.m.

Friday, July 7 at 7:30 p.m.

HOT RIZE, RED KNUCKLES, AND THE TONY RICE UNIT

(Raindate: Saturday, July 8 at 10:00 a.m.)

Tickets: \$8.00 each (Member price: \$6.00)

(On sale at outlets starting June 26)

It's a veritable Bluegrass Festival at the Gardens this summer! Two nights with longtime favorites Hot Rize and their alter egos Red Knuckles and the Trailblazers. If that weren't enough, we've also added Tony Rice and the Tony Rice Unit to make it a full night of music. Tony's one of the true virtuosos of the acoustic guitar and he and his quartet will be sure to please anyone who enjoys great music with a bluegrass feel.

Thursday, July 20 at 7:30 p.m.

THE NATIONAL REPERTORY ORCHESTRA

(Raindate: Friday, July 21 at 7:30 p.m.)

Tickets: \$7.00 each (Member price: \$5.00)

(On sale at outlets starting July 10)

As anyone who's heard a full symphony orchestra perform in the garden's amphitheater knows, this is an evening not to miss. Returning to Colorado this summer from their triumphant appearance at the Seoul Summer Olympics (the only American orchestra invited to perform), the National Repertory Orchestra plans an exciting evening of classical music. Carl Topilow will conduct this single evening performance. Tickets will go fast!



Thursday, August 3 at 7:30 p.m.

MUSIC FROM THE SANTA FE CHAMBER MUSIC FESTIVAL

(Raindate: Friday, August 4 at 7:30 p.m.)

Tickets: \$8.00 each (Member price: \$6.00)

(On sale at outlets starting July 24)

One night only — and a very exciting one at that! The Santa Fe Chamber Music Festival has commissioned composer Bruce Adolphe to create a new work for the summer of 1989 entitled Sharehi (Dancing Stories). Sharehi is a chamber music - dance- theater piece based on the myths and legends of southwestern American Indian tribes. Many of the best musicians in the world gravitate towards the Santa Fe Chamber Music Festival each summer, and we are always honored when they make time to visit us in Denver.

Thursday, August 17 at 7:00 p.m.

Friday, August 18 at 7:00 p.m.

THE DIRTY DOZEN BRASS BAND

(Raindate: Saturday, August 19 at 10:00 a.m.)

Tickets: \$7.00 each (Member price: \$5.00)

(On sale at outlets starting August 7)

We had great fun last summer with a little known band from New Orleans called the Dirty Dozen Brass Band. In the months since then they've been more active than ever with a world tour, a new record of their own on CBS, and guest appearances with the likes of Elvis Costello and David Byrne. If you heard them last summer, we know you'll be back. If you missed them, we've got two nights of "Mardi gras in the gardens" for you this summer.

Thursday, August 31 at 7:00 p.m.

Friday, September 1 at 7:00 p.m.

JUDY COLLINS with JOANN FALLETTA and THE DENVER CHAMBER ORCHESTRA

(Raindate: Saturday, September 2 at 10:00 a.m.)

Tickets: \$12.00 each (Member price: \$10.00)

(On sale at outlets starting August 21)

We've been waiting a long time to bring you two evenings of music like this. The beautiful voice and song of the legendary Judy Collins combined with the orchestral accompaniment of the Denver Chamber Orchestra. We suspect you'll never again have an opportunity to hear and see Judy Collins in such an intimate setting. A perfect conclusion to a wonderful summer of music.

MAIL ORDER TICKET COUPON

*Mail orders must be received no later than June 14th.

*There is a limit of 10 tickets per concert on all mail orders.

*Incomplete or incorrect orders will be returned to sender.

*There is a \$.75 per/ticket service charge on all mail order and phone order tickets.

If you wish to take advantage of the KCFR or Denver Botanic Gardens member discount, your membership must be current, and you must use the exact name (or names) on your card when ordering tickets.

☐ I am a member of KCFR-FM. Member No. _____ Exp. Date _____

☐ I am a member of the Denver Botanic Gardens. Exp. Date _____

(Concert prices - member and non-member - are listed with concert descriptions) Children 2 and under attend FREE. All others require a ticket.

CONCERT DAY & DATE	CONCERT NAME	NO. OF TICKETS	PRICE	TOTAL
		X	\$	= \$
		X		=
		X		=
		X		=
		X		=
		X		=
		X	\$.75	=
(Service Charge equals total No. of tickets X \$.75) SERVICE CHARGE		X		

GRAND TOTAL

\$

Please mail my tickets to:

Name _____

Address _____

City _____ State _____ Zip _____

Home Phone _____ Daytime Phone _____

☐ Check or money order enclosed (Payable to KCFR/DBG)

☐ Visa ☐ MasterCard ☐ American Express

Card No. _____ Exp. Date _____

All sales are final. No refunds. No exchanges. All events will be held on their originally scheduled dates, or on the raindates listed. There are no refunds for events held on their scheduled raindates.

ListenUp Garden Concerts

Denver Botanic Gardens and public radio station KCFR-FM have another summer of outstanding entertainment on the way—with a new series sponsor and new, convenient ways to purchase your tickets.

Enclosed in this issue of the *Green Thumb News* is a series brochure for what we call the "ListenUp Garden Concerts." Please read it carefully for information about ordering concert tickets. Note that this season you may order your tickets by mail if you act before June 14. Or you may order by phone starting on June 5. For those of you who prefer buying tickets one concert at a time as you have done in the past, we'll make sure there are at least a limited number of tickets on sale at each outlet prior to each event. The brochure contains all the information you need for a happy—and musical—summer. If you have questions, please call KCFR at 871-9191. Please do not call Denver Botanic Gardens.

ListenUp Corporation has become one of the top 10 audio retailers in the nation, a company that has built its reputation by offering residential and commercial customers audio equipment. Always on top of the latest in hi-fi technology, ListenUp has become a national leader in bringing state-of-the-art equipment to music lovers. And now ListenUp helps to bring an outstanding summer of music to the Gardens.

As for the music, here are some highlights of the upcoming ListenUp Garden Concerts:

We'll start things off with two evenings of great, turn-of-the-century American music with New York's Paragon Ragtime Orchestra. In 1985 Rick Benjamin discovered the long-lost manuscript library of legendary band leader Arthur Pryor (look through that stack of old 78s in the attic to understand Pryor's popularity). Quickly gathering up 14 of his fellow Juilliard colleagues and alumni, Benjamin has created a brilliant and authentic sound in the Paragon Ragtime Orchestra. Get out that straw boater for these two special performances on June 22 and 23.

One other highlight we'll mention here is the August 31 and September 1 appearance by the legendary Judy Collins with JoAnn Falletta and the Denver Chamber Orchestra. Need we say more?

Save the enclosed brochure in this issue of the *Green Thumb News* and look for the June issue for more details on a great summer of music. Remember, if you do wish to order your tickets by mail, read the brochure carefully and make sure your order is mailed no later than June 14.

Young Audiences Concerts at the Gardens

The popular "Listen to the Gardens" series is an opportunity for the whole family to celebrate summer in the Gardens. These family-oriented concerts are brought to you by Young Audiences, Inc. in cooperation with Denver Botanic Gardens and Pace Membership Warehouse, Inc.:

Beauty and the Beast
Tuesday, June 27
Raindate: Sunday, July 2

Movement, Myths and Masks
Tuesday, July 11
Raindate: Sunday, July 16

Rock, Rocka, Rockadiles
Tuesday, July 25
Raindate: Sunday, July 30

Concerts begin at 6:30 p.m. with open seating available 45 minutes



beforehand. Raindate performances begin at 10:00 a.m.

Tickets are \$4 each, with children under age two free. Call 825-3650 to purchase tickets with VISA, MasterCard, or Choice. A dollar service charge will be added to each phone order.

One week prior to each concert date tickets will also be available at Denver Botanic Gardens House, 909 York Street.

Additional information, including ticket-sale hours, will be provided in the June newsletter, but make your plans now to bring the family to these fun-filled concerts.

If you are interested in volunteering at the "Listen to the Gardens" concerts please call the Young Audiences office at 825-3465 and leave your name and number.

News From the Gift Shop

The Denver Botanic Gardens' annual Plant and Used Book Sale scheduled for May 12-13 is also the occasion for the Gift Shop to unveil its new line of merchandise for spring.

Baskets, essential items for gardeners, can be ornamental as well as useful. The Gift Shop buyers have found some beauties. Look for the selection of rustic, handwoven baskets with handles of shed antlers. The artist collects all materials and lovingly weaves them into individual statements of nature's beauty. Also featured are Chinese woven baskets, that have been waxed for protection.

The geraniums and impatiens that you buy at the sale will be beautifully set off in our terracotta planters decorated with flowers and birds. Real birds will appreciate their selection of

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Concertgoers really enjoyed the Dirty Dozen Brass Band last year.

terracotta and thrown pottery bird feeders and birdhouses.

The Gift Shop is again featuring garden statuary by Hen & Feathers. Made of durable bonded marble, these winning sculptures of animals and children are fully weatherproof.

To bring the music indoors, hang our painted, flower-decorated door chimes inside the front door. They sweetly chime your coming and going.

SUMMER GIFT SHOP VOLUNTEERS NEEDED: Between extended evening hours and many regular Gift Shop volunteers taking vacations with their families, the Gift Shop is in need of volunteer help this summer. Volunteers work three to four hour shifts mornings, afternoons or evenings. If you have a few hours to give this summer and enjoy working with people please call Susan Kosmiski at 331-4009.

"The Flowering of Denver"

continued from page 1

Plants from 14 divisions will be displayed throughout the gardens. Watch for colorful flags noting their locations, which are similar to last year's. The divisions are: annuals, patio, children's, perennials, herbs, berry basket, home donations, rock alpine, ground-covers, summer bulbs, vegetables, water lilies, trees and shrubs, and cacti. Houseplants are located inside John C. Mitchell II Hall, and the book division occupies the classrooms downstairs.

Susan Coombe, who heads up the book sale, offers a varied selection of topics that includes cooking, gardening, art and biographies. You will find mountains of fiction, and science fiction fans will be especially pleased this year. There is also an assortment of stamps, records and tapes. Profits are used for acquisitions for the Helen Fowler Library.

If you look carefully you can find anything you want for your garden at the Plant and Used Book Sale.



New this year to "The Flowering of Denver" is Birdsall and Company. This firm specializes in the finest tools and garden accessories, including spades, hoes, forks, pruners and shears. Of particular interest is a long-handled transplanting trowel. In addition, they feature classic terracotta pots, plantation-grown teak benches (the lumber is *not* plundered from rain forests), galvanized steel flower market pails with brass trim, and brass animal faucets and sun dials.

Music will fill the air throughout the sale. On Friday, the "Balinese Gamelan" will delight our patrons. An ensemble of instruments indigenous to the island of Bali in Indonesia, the gamelan features some of Denver's

foremost musicians. "Seventh String" is a Celtic duo who performs traditional music on string, percussion and woodwind instruments. Deb Seymour and Ann Krohn (the components of the Celtic duo) will stroll throughout the Gardens. Environmental inspirational sounds will greet visitors inside the Lobby Court, with Karen and Chad MacCluskey performing on keyboard, synthesizer and guitar. On Saturday, the traditional folk group "Pangea" will entertain in the amphitheater.

Norma Linderholm and Pat Sadlowski have scheduled their fabulous team of cashiers at the Gaylord gate and the south gate at the parking lot behind the Botanic Gardens House at 909 York Street. Express lanes will expedite check-out and Visa and MasterCard are welcome. Customer service chairman D. J. Inman has arranged crews at each check-out gate to man the "plant corrals." They will issue claim checks, watch carts while drivers get their cars, and assist with loading. Parking restrictions will be in effect on York

Street and 11th Avenue to accommodate picking up purchases. Customers may enter the Gardens through the west gate in the park. (PLEASE NOTE: There will not be check-outs at this gate; it is for entrance only.)

"The Flowering of Denver" is a major source of funds for Denver Botanic Gardens and your support helps to maintain and beautify the gardens. Many thanks are extended to the dedicated volunteers who make this event so successful and rewarding.

Emerson R. Birchfield on Garden Jewels

If there's a plant out there I don't like, I'd be hard-pressed to name it. On the other hand, I do have particular favorites, whose blooms have inspired me to drag unwary visitors to share my rapture and have tempted me to write poetry. (Being a self-styled connoisseur can also make one a tremendous bore.)

The "Flowering of Denver," the 40th Plant and Used Book Sale on May 12 and 13, gives us all a chance to seek out the choice and unusual, as well as whatever we can stuff into a shopping cart. The jewels of the plant kingdom are many, and while I try to remember that beauty is in the eye of the beholder, nothing is going to stop me from proclaiming my favorites.

If you think when you've seen one phlox, you've seen them all, visit the rock alpine division. For Kathy Borgen and Linda Goldstein, phlox is the keynote this year, and they are featuring many varieties from a diverse family. Two of my favorites are *Phlox bifida* 'Betty Blake', with low mounds of deep lavender snowflake-shaped blooms, and 'Boothman's Variety', a creeping charmer sporting paler lavender flowers with darker eyes.

The dianthus family has many star performers. If I had to single out one it might be 'Tiny Rubies.' The silvery mounds are smothered each spring with deep pink, clove-scented flowers the size of a button.

One need not possess a rock garden to grow most dianthus, phlox, or many of the alpine plants. For those whose garden is as flat as a pancake, even the tiniest treasures can be grown in troughs. Meant to echo the antique English stone sinks, these troughs are relatively light and provide a perfect home for small alpine (discarded bathtubs and truck tires are not acceptable, to my mind). I have gone hog-wild over these troughs. I cannot negotiate my patio without stubbed toes and cursing. They are a delight, however, most times of the day and in all seasons, and I dote over the miniature treasures that would otherwise be lost in my unruly perennial borders.

While we're on the subject of containers, Rosemary Laughlin and her crew have devised some lovely terrace baskets. While many are one-of-a-kind creations, she offers classic themes especially for us in wicker and twig baskets. "Victorian Fancy" is a lush planting of vivid geraniums, blue salvia, yellow marguerite daisies, white petunias and variegated English ivy. "Shady Delight" glows in partial shade with pink tuberous begonia, delicate blue lobelia, Dahlberg daisies and cascades of ivy. Complementing

these are cast statuary, including some with buff or dark gray tints. My favorites include a charming pineapple (the symbol of friendship and hospitality), a sleek cat, an Oriental dragon (picture him nestled beneath ferns), and Greek column pedestals (perfect for perching a "Victorian Fancy" basket).

Lori Most's herb division has more innovative container plantings: eight-inch terracotta dish gardens with three themes. An assortment of culinary herbs, some for tea are offered, complete with care tips and recipes. She will feature gallon-sized pots of 'Spicy Globe' basil, French tarragon, English lavender and rosemary. Lori says, "These are ideal for container gardening, and you can start snipping on them right away." Covering the spectrum from angelica to wormwood, there are over a hundred herbs this year, including selections dug directly from the DBG Herb Garden.

Speaking of digging, the crew of the home donations section, including co-chairs Marilyn Moore and Elinor Newmarker, have been potting up thousands of perennial divisions from generous city gardeners. Last year I was tickled to find pink lily-of-the-valley, a tall graceful spuria iris, refined *Astrantia* 'Margery Fish', and *Lamium* 'Archangel', a variegated beauty with pale yellow flowers for a shady position. Many of these plants are also dug directly from the DBG beds, and there is something very satisfying about establishing them at home—sort of like owning a piece of the rock. Potted divisions and seedlings can be left inside the Gaylord Street gate, or they can be brought on May 12 to the home donations section, labeled with common name, height, color and botanical name (if known). For additional information call Marilyn Moore, 388-6934.

My vegetable garden has become a lot more fun since I met Knobby Brown, our resident "Queen of the Veggies." I used to think a vegetable garden was just some out-of-the-way place for a few tomatoes; now she's made me a connoisseur of vegetables as well. How can I survive now without (and where else would I find) 'Carmen Red' onions, globe artichokes, tomatillos for salsas, 'Swan White Table Queen' squash, or 'Guilio' radicchio, a gourmet Italian chicory harvested during the summer? But that's just the tip of the iceberg. This year Knobby and her co-chair, Jane Russell, will tempt us all with two new tomatoes, aside from 10 tried-and-true varieties. Cherry tomato 'Sweet Million' is exceptionally disease resistant and productive—kids of all ages will love the sweet flavor, and 'Taxi' produces baseball-size, taxicab yellow, sweet fruit.

My mouth waters hearing about a new hot bell pepper, 'Mexi Bell'. Knobby's



The Plant and Used Book Sale is a banner event.

just as enthusiastic, exclaiming, "It really is a new taste sensation! It's the first bell pepper with a mildly hot flavor. Can you imagine spicy stuffed peppers?" Other introductions of note are the early-maturing 'Earli-Dew' honeydew melons, 'Sweet Success' cucumbers, mild and sweet 'Walla Walla' onions, bush 'Vardaman' sweet potatoes, and heavy-yielding 'Tycoon' eggplants.

There are additional fascinating vegetables in Joedy Arnold's section just for children. Nothing could be more fun for young gardeners than 'Bumblebee' soup beans, 'Blizzard' peas, 'Dinosaur' gourds, 'Ghost Rider' pumpkins, and 'Rat Tail' radishes. As always, volunteers will help youngsters plant a blooming basket for Mother's Day. They can also learn how to use dried flowers and "squirrel tail" grass to make bouquets or wreaths for their rooms; or make a special treat for the birds. I, personally, can't wait to try a 'Rat Tail' radish.

Water gardeners usually make a beeline for the treasures in Darlene Thomas' water lily division. The prices for the hardy water lilies and bog plants, as well as the selection, are exceptionally good. Fertilizer is also available for water plants, as well as excellent cultural advice from Colorado Water Garden Society volunteers.

There are a good many jewels in John Reber's perennial division, and I won't bother again to tell you that purple coneflower (*Echinacea purpurea*) is really wine-pink and is the best thing since sliced bread, so we'll just go on with some other choice plants. I can't say enough about *Anemone* 'Honorine Jobert'—it is a dazzler! Late summer is just about the time we need the glorious five-foot spectacle of pure white flowers with golden centers. Its cousin, *A. vitifolia* 'Robustissima', is equally charming with a dusty pink color and shorter stature. Graham Stuart Thomas, the eminent British

plantsman (and my good buddy) states, "These flowers can compete in beauty with all the flowers that have gone by during the season—daffodil, iris, lily or rose—as if nature decided on a final fling." Anemones thrive in partially-shaded beds, as does *Aruncus dioicus* 'Kneiffii'. This compact version of the classic goatsbeard is a stately plant topped by cream-colored plumes, and deserving of a more dignified name.

I'm also quite passionate about *Aconitum napellus* or monkshood, something like a somber delphinium with deep purple hooded flowers on graceful spikes. *Ligularia* 'Desdemona' has dark round leaves, golden daisy-esque flowers, and prefers shade. *Trollius euroaeus* will also brighten a shady spot, and its unusual incurved blooms explain its designation as "globoseflower." I would be remiss not to mention *Heuchera micrantha* 'Palace Purple', a form of coralbells with conspicuously beautiful burgundy foliage, and *Geranium macrorrhizum* 'Walter Ingwersen', a splendid weed-proof ground cover sporting soft rose pink blooms in great profusion and divided aromatic leaves.

If none of these bright baubles has tempted you, I have done a sorry job. While I dispute the old notion that diamonds are a girl's best friend (my wife leans towards heavy gold and Egyptian alabaster), a man without his flowers would be a poor one indeed. May "The Flowering of Denver" enrich all our gardens with the loveliest of jewels.

(Emerson R. Birchfield is our special correspondent for "The Flowering of Denver." We never know when he speaks of "Summer Madness" whether he means his petunias or his state of mind. While we would not go so far as to suggest he has bats in his belfry, he does have bachelor buttons on his balcony.)

Spring
1989
Denver Botanic Gardens

CLASSES



Wildflower Photography Lecture

(one session)

Friday, June 9

7 to 9:30 p.m.

John C. Mitchell II Hall

Learn the art of wildflower photography from a nationally recognized expert. This comprehensive and beautiful presentation is open to wildflower lovers as well as photographers and will cover the following topics: finding flowers, selective gardening, plant protection, equipment, lighting, backdrops, uses of depths of field, filters, films, metering, composition and special effects.

Instructor: John D. Smithers is the owner of DeHart Media, an award-winning firm in Austin, Texas, and holds a master's degree in radio-television-film from the University of Texas. He serves as photographer and audiovisual producer for the National Wildflower Research Center.

Fee: \$10 members/\$12 non-members



Wildflower Photography Workshop

(two sessions)

Students must attend the lecture on Friday, June 9 from 7 to 9:30 p.m. and may choose either

Section I: Saturday, June 10

**Section II: Sunday, June 11
6:30 to 11 a.m. and 6 to 9 p.m.**

(Please indicate your section on the registration form.)

Learn the fine art of wildflower photography in this hands-on workshop. Participants will attend the Friday evening lecture and will then photograph flowers at Denver Botanic Gardens bright and early when the light is best on either Saturday or Sunday morning.

After their slide film is developed, students will reconvene for critiques in the evening. The instructor promises that this immediate feedback is a very effective learning tool that is also exciting and fun.

The following materials are required: one 35mm camera with a macro lens and a carrying bag, and one tripod, preferably one that can be lowered close to the ground. In addition, please bring these items, if you have them: normal, wide angle and telephoto lenses; ringlight or standard flash unit with remote sensor; 18 percent reflectant gray card; lens extension tubes or bellows; kneepads; small atomizer for spraying "dew" on flowers; polarizing and 81-A filters for

your favorite lens; and a shutter release cable.

Please note that students should already have a good working knowledge of their camera.

Workshops are co-sponsored by the National Wildflower Research Center and Eastman Kodak Company, Professional Photography Division.

Instructor: John D. Smithers

Fee: \$60 members/\$66 non-members (this includes two rolls of 36-exposure slide film and processing)

Limit: 15 per section



Photography and Botanical Illustration Field Trip

Wednesday, June 28

8:30 a.m. to 4 p.m.

This is a field trip to the historic Evans Ranch, near Evergreen, for students of photography or botanical illustration. Established in 1868, this 3,200-acre ranch has a spectacular view of Mount Evans and a lush collection of mountain wildflowers. Beginners to experts are all welcome.

Wear sturdy walking shoes and remember to bring rain gear, a sack lunch, drinking water and our own drawing materials or photography equipment.

Suggested photographic equipment consists of: Kodachrome film (ASA 25 or 64), tripod and macro-lens or three-ring lenses. Suggested drawing materials are: drawing pad and pencils, magnifying glass and watercolors or colored pencils.

Meet: promptly at 8:30 a.m. in the main DBG parking lot to carpool.

Instructors: Bob Heapes is an experienced field trip leader, nature photographer and popular lecturer. Angela Overy received her National Diploma of Design and designed in London, New York and San Francisco before settling in Denver.

Fee: \$8 members/\$9 non-members

Limit: 15 photographers and 15 illustrators. Please identify on the registration form which category you are most interested in.

Botany for Beginners

(four sessions)

Wednesdays, May 17, 24, 31, June 7
7 to 9 p.m. Classroom B

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This is fundamental if you wish to know how to identify plants; it will also help you appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

Instructor: Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

Fee: \$32 members/\$35 non-members

Limit: 15



Mushroom Identification

(two sessions)

Saturdays, June 3, 10

Classroom C

8:30 a.m. to 12:30 p.m. and optional field trip from 1:30 to 3:30 p.m.

This course will present mushroom identification for beginners and will provide a base for those who may wish to pursue the subject in more depth in the future.

Spring-fruited mushrooms of the city as well as the summer fruiting species of the high country will be covered.

Two slide-lecture sessions cover structure, growth, habitat, seasonality, toxicity and edibility of mushrooms. The use of field guides and keys will be demonstrated and recommendations will be given on those most useful in our area. Recommended field guides will be available for purchase.

Handouts will be distributed but students should be prepared to take additional notes. Participants will learn to positively identify more than 20 common edible, non-edible and poisonous mushrooms in addition to helpful collecting, cleaning, preparation and cooking hints.

An optional field trip to areas near the Gardens will be scheduled in the afternoon of each session.

Those planning to attend the field trips should bring a sack lunch. Prospective students should be on the lookout for early mushrooms and may bring them to class for identification.

Instructor: Marilyn Shaw lectures and teaches extensively and has been

active in the Colorado Mycological Society for 16 years. Ms. Shaw is a consultant in mushroom identification for DBG and the Rocky Mountain Poison Center.

Fee: \$32 members/\$35 non-members



Wildflowers of the Plains Field Trip

Saturday, May 13
10 a.m. to 3 p.m.

This spring field trip at the edge of the plains at Plainview is an opportunity to see the spring flora of this area in its full glory. See the Rocky Mountain iris, orange arnica, western wallflower, bluemist penstemon, Easter daisy, spring-beauty, pasqueflower and many others.

Don't forget to bring your lunch and drinking water; if you have wildflower field guides and a hand lens, they would also be useful.

Meet: promptly at 10 a.m. at the junction of Highways 93 and 72 between Boulder and Golden in the parking lot at the southeast side of the intersection. Please call the education department if you have questions.

Instructor: Paul D. Kilburn, Ph.D., has taught botany and ecology in Illinois and Colorado for many years.

Fee: \$5 members/\$5.50 non-members



Ecology and Flora of North Table Mountain

(one session)

Sunday, May 28
10 a.m. to 3 p.m.

This is a field foray to examine the native biology as well as man's use of this lava-capped mountain, rising 1,000 feet above the plains and located northeast of Golden just 15 miles from Denver.

Explore this natural history gem with its wide variety of grassland and shrub communities, geology and wildlife. See stands of mountain mahogany, snowberry, skunkbush, chokecherry, mountain maple, lichens and the abundant spring flowers of the foothills.

Meet: promptly at 10 a.m. 1.8 miles north of Highway 58 (Golden) on Highway 93 at the gravel road on the east side of Highway 93 (by small cottage).

Instructor: Paul D. Kilburn, Ph.D.

Fee: \$5 members/\$5.50 non-members

Limit: 18

Japanese Tea Ceremony

Section III: Sunday, May 14
Section IV: Saturday, May 20
Section V: Sunday, June 11
Section VI: Saturday, June 17
Section VII: Sunday, June 18
(Get your fathers out for this one.)

(one session) 2 to 3 p.m.
Tea House in DBG's Japanese Garden

(Please indicate your section on the registration form.)

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

Fee: \$4.50 members/\$5 non-members

Limit: 15



Basketry Techniques: Pine Needle-Raffia

(three sessions)

Section II: Tuesdays, May 9,* 16, 23
6 to 8:30 p.m. except
May 9* when the class ends at 9 p.m.
Morrison Center at Denver Botanic Gardens

Please indicate your section on the registration form.

This elegant style of basket is constructed through a coiling technique using long-leaf pine needles and raffia. Suitable pine needles, from 6-18 inches long, are found on the West Coast, in the Great Lakes region and on the southeastern Gulf Coast. Natural raffia is used for the stitching and intricately woven patterns.

With homework, each student can expect to complete a modest-sized basket designed specifically for this class. Variations on the design or individually designed baskets, however, are highly encouraged.

Beginners and experienced basket-makers are all welcome. Don't forget your scissors; all other materials will be provided.

Instructor: Debbie McClelland studied art education at Eastern Michigan University and has conducted many classes and demonstrations that showcase her expertise in

this revived Civil War art.

Fee: \$36 members/\$39 non-members (includes a \$4 materials fee)

Limit: 10 per section



Watercolor Painting

(five sessions)

Wednesdays, May 24, 31, June 7, 14, 21

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

All classes will meet in the Morrison Center at Denver Botanic Gardens.

(Please indicate your section on the registration form.)

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors, with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: 1½-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$60 members/\$66 non-members

Limit: 12



Watercolor Workshop

(one session)

Section I: Saturday, June 3

Section II: Wednesday, June 28
9:30 a.m. to 3:30 p.m. Classroom B

(Please indicate your section on the registration form.)

Spend a day in the Gardens capturing the glory of June's flowers in watercolor. The course includes exercises in perception and instruction in the stages of developing a painting. An elementary understanding of watercolor is preferred.

Bring watercolor supplies, drawing paper and charcoal, something to sit on and a lunch.

Instructor: Lynette Swanson-O'Kane

Fee: \$22 members/\$24.25 non-members

Limit: 12



For Preschoolers ages 3-4

Small-Fry Safari

(four sessions)

**Monday through Thursday,
July 17-20
9:30 to 11 a.m.**

Classroom B

Three and four year-olds will use their senses to discover the magic of the Gardens in summer. Feel the soft, furry leaves of lamb's ears and sniff the pine-scented rosemary in our Herb Garden. See rainbow-colored flowers. Visit our green zoo and hunt for tiger lilies, snapdragons, foxgloves and other beastly plants.

Storytelling will inspire drawings and paintings.

Instructor: Kari Gomez

Fee: \$25 members/\$27.50 nonmembers

Limit: 8

Seeds and Shoots

(four sessions)

**Monday through Thursday,
July 31 - August 3
9:30 to 11 a.m.**

Classroom B

Three and four year-olds will explore our gardens and use their senses to discover the plants we eat and enjoy. Hear stories full of enchanted forests and flowers. Listen to classic plant tales such as "The Princess and the Pea" and "Jack and the Beanstalk."

Touch silky, fluffy seeds that fly and some that float on oceans. Harvest

ripe vegetables and sample a fresh garden salad. Make a seed necklace to take home.

Instructor: Kari Gomez

Fee: \$25 members/\$27.50 non-members

Limit: 8

For Children of Ages 5-7 and 8-11

Brontosaurus Brunch

(four sessions)

**Monday through Thursday,
June 26-29**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

What did dinosaurs devour? Learn which ones probably feasted on plants and what they were like. Our garden is full of the prehistoric ferns, horse-tails and leathery-leaved cycads that once lived in swamps and bogs.

See the stately dawn redwood tree that dates back from 150 to 270 million years. Make rubbings of the fossil plants in our rock collection and use sunlight to create prints of living fossil plant leaves.

Instructors: Section I—Bob Anjo;
Section II—Margaret Maloy

Fee: \$30 members/\$33 non-members

Limit: 12

The Festival of Stars

(four sessions)

**Monday through Thursday,
July 10-13**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

Celebrate *Tanabata*, the Japanese star festival of summer, in our traditional Japanese Garden. Listen to the ancient story that honors the meeting of two stars under the Milky Way. Copy your special wishes on colorful paper and then tie them to a bamboo branch.

Tour this garden with its Tea House, bridges, lanterns, turtles and gold-fish. See the bonsai trees that are 30 years old and only 12 inches high. Make origami and use a bamboo brush and rice paper to make your own scroll.

Instructor: Rita Craig

Fee: \$30 members/\$33 non-members

Limit: 12

Under the Canopy

(four sessions)

**Monday through Thursday,
July 17-20**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

Explore the steamy, noisy world of the tropical rain forest. Learn about the home of brilliant butterflies and vampire bats. Discover plants that clamber and climb and orchids so beautiful they are called jungle jewels. See swimming pool plants with tanks full of water where insects can live.

Discover how tasty treats like chocolate and vanilla grow, and use them to make ice cream for tropical sundaes and fruit floats. Sample papaya, mango, pineapple and coconut.

Instructors: Section I—Bob Anjo;
Section II—Margaret Maloy

Fee: \$30 members/\$33 non-members

Limit: 12

Birds, Bats and Beetles

(four sessions)

**Monday through Thursday,
July 24-27**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

Plants and animals have amazing ways of getting together. Which creature has a nose so keen it can sniff out just when bananas are ripe? Learn how birds, bats and beetles all gather the superfuel called nectar.

Find out which colors birds can see and discover the secret markings that

invite six-legged visitors to flowers. Watch ant armies, see how bees make honey and make creature catchers for your own insect zoo.

Instructors: Section I—Linda Fogel;
Section II—Carolyn Brewer

Fee: \$30 members/\$33 non-members

Limit: 12

Wild and Woolly

(four sessions)

**Monday through Thursday,
July 31 - August 3**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

Have you ever seen a vegetable sheep? What about cowboy's delight and needle-and-thread grass? Our gardens are full of wonderful wildflowers.

Learn which plants the Indians and early pioneers used for tea, baskets and even soap. Listen to the legend of the Indian paintbrush. Sketch our blue bonnets, pussytoes and black-eyed Susans.

Tour our mountain meadows and prairie in the city. Take home a Colorado columbine to start your own wild-flower garden.

Instructors: Section I—Linda Fogel;
Section II—Carolyn Brewer

Fee: \$30 members/\$33 non-members

Limit: 12

Land of the Lotus

(four sessions)

**Monday through Thursday,
Aug. 7-10**

**Section I: For 5-7 year-olds
9:30 to 11:30 a.m.**

**Section II: For 8-11 year-olds
1:30 to 3:30 p.m.**

Classroom A

**(Please indicate your section on
the registration form.)**

The waterways of the Gardens are stocked with wet wonders. See the giant water platter from the Amazon and listen to why the lotus is sacred to so many. Do you know which water plant is so tiny that 25 will fit on your little finger?

See our special pond ballet put on by water skimmers, back swimmers, water striders and water boatmen. Look at hidden underwater life with a microscope. Paint our dragonflies, darning needles and brightly colored water lilies.

Instructors: Section I—Bob Anjo;
Section II—Margaret Maloy

Fee: \$30 members/\$33 non-members

Limit: 12

About our Instructors

Bob Anjo is a teacher with 19 years of experience who is the Dean of Students at Prairie Middle School, Cherry Creek Schools.

Carolyn Brewer is a certified biology and earth science teacher who enjoys showing children that "science is a gee-whiz kind of subject."

Rita Craig has 25 years of teaching experience and believes that her sense of humor is one of her strongest assets in the classroom.

Linda Fogel is a capable kindergarten teacher who was awarded the Denver Public Schools Elementary Teacher of the Year Award in 1969.

Kari Gomez studied early childhood education and has been employed by the Denver Public Schools since 1973.

Margaret Maloy is an enthusiastic teacher at Prairie Middle School with a special interest in an interdisciplinary approach to learning.

**Denver Botanic Gardens
909 York Street
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Art Museum Hosts Garden Club of America Flower Show

A rare event is forthcoming on June 8, 9 and 10. The Garden Club of Denver, the Broadmoor Garden Club and the Denver Art Museum are joining hands to present a Garden Club of America flower show, "Flowers and Art." Participants will be from the Denver and Broadmoor clubs as well as Santa Fe and Kansas City. Judges will come from across the United States. The show is at the Art Museum.

A sponsor donation lunch on Thursday, June 8, is the first event. Featured will be Washington, D.C.'s renowned floral designer, Leonard Tharp, gathering Colorado wildflowers for later use, and joining these guests for lunch at Mrs. Bruce Benson's house. Tickets for this outing include the Benson lunch, the Preview Party, and all Friday day activities including Tharp's lecture and a picnic-basket party at the Museum. The price for this package is \$200.

The Preview Party Thursday night will be a first look at the flower arrangements, coordinated with art treasures on several floors of the Art Museum. Drinks, dinner, tours, and a Monet movie are all part of this choice evening's entertainment. Tickets for the Preview Party will be \$45.00.

On Friday, Mr. Tharp will lecture on the American style in flower arranging. Donated floral arrangements from local experts will be silently auctioned the night of the Preview Party. These tickets include lunch and are \$45.00.

On Saturday, the flowers, the museum, special exhibits by the Bonsai Society, Ikebana and all the fun will be opened to the public for a viewing at regular museum admission prices.

Flowers and Art—a memorable three days for Denver.

Chatfield Arboretum Highlights

The culmination of many dreams is being fulfilled at Chatfield Arboretum this spring. Both a Nature Center and a self-guided riparian trail system are being constructed, thanks to a very generous bequest from the estate of Pauline Roberts Steele, one of the early, dedicated Associates and volunteers at Denver Botanic Gardens.

Polly Steele, as she was known to her many friends at the Gardens, was very interested in preserving land for its natural beauty. Polly was very skilled in crafts associated with the natural environment and drew many



botanical illustrations for the *Green Thumb Magazine* until her death in 1977.

Reflecting the interests of Polly Steele, the first project that will be completed this summer is a new interpreted trail system on the north side of Deer Creek. In accordance with her will, this trail will be named for her mother and herself, "The Dora and Pauline Roberts Riparian Trail." New trail markers will be installed along the trail to correspond with an already completed interpretive guide; a footbridge will be built to connect with the Moras L. Shubert wetlands trail on the opposite side of the creek; and rest areas, with benches, will be placed for relaxation and bird observation.

The Polly Steele Nature Center is being transformed into reality from one of the Green Farm homes on the south side of Deer Creek. With its airy, wide-screened porch, which encircles three sides of the building, classes can be held shielded from summer heat while close to classroom supplies.

The interior of the Nature Center will include a combination library and conference room, with reference materials for nature classes; a laboratory for indoor classes, an office/laboratory for the Martin Marietta wildflower project and a lunchroom. Locker space will also be provided for all the volunteers working throughout the Arboretum.

To date, new electrical wiring, a heating system, insulation and new plumbing have been installed within the building. With completion of the replastering, most of the interior work will be accomplished by volunteers. The Polly Steele Nature Center will be readily accessible via a new bridge that is under construction on the west side of the property. A dedication of the Roberts Trail and Steele Nature Center will be held in late summer.

Concert and Lunch at the Gardens

Come delight your senses at a luncheon and concert at Denver Botanic Gardens on Wednesday, May 3. The Gardens opens at 9 a.m., with the catered lunch at 11:00. The concert begins at 12:30 p.m. The internationally acclaimed Lehnert Duo will perform for this event being organized by the greater-Denver-area music teachers' association. Ticket sales will benefit the Gardens.

In addition to the non-member admission fee for the Gardens, luncheon tickets are \$7.50 and concert tickets are \$3.50. Contact Arlyce Black at 795-8162 for tickets and information.

Workshop on Old Garden Roses

On Sunday and Monday of Memorial Day weekend the Denver Rose Society will hold a new event at the Gardens. "Workshop on Old Garden Roses" will feature educational exhibits of species roses and non-modern hybrids, mini-lectures among the exhibits and a lecture by Stephen Scaniello, Curator of Old Garden Roses at Brooklyn Botanic Garden.

Mr. Scaniello's talk will be at 1:00 p.m. Sunday, May 28. Tickets are \$2 and go on sale in the Gardens' lobby at noon before the lecture. This is an excellent opportunity to hear one of the foremost experts on shrub roses in North America.

The exhibit and minilectures, which will cover many aspects of using and appreciating these old-fashioned, fragrant shrubs, will begin Monday morning at 9:00 a.m. There will be no charge for the day's events, but the Gardens' regular summer gate fee, \$4 for adults, will be in effect during all workshop activities.

For more information on this workshop, the first of dozens of special events planned at the Gardens for the summer, call 331-4000, extension 44.

Ikebana Flower Show on May 20 and 21

Four different schools of Ikebana flower arranging will be represented in the spring flower show offered at the Gardens by the Denver Chapter of Ikebana International.

"Springtime in the Rockies" will be in John C. Mitchell II Hall on Saturday and Sunday, May 20 and 21. The show will be open to the public from 9 a.m. each day until 4:45 p.m. on Saturday and 4 p.m. on Sunday.

For more information call Fran Wittgartner, president, at 688-6723, or Denver Botanic Gardens at 331-4000, extension 44.

Gardening: Prairie Grasses for Denver Lawns

Owners of bluegrass lawns often feel trapped. But they can escape the twice-weekly watering, the repeated application of expensive fertilizers, the constant demand for mowing and grooming and the reliance on pesticides that bluegrass culture demands. The key is close at hand and relatively simple: Choose more suitable grasses.

Before the land now covered by our cities, croplands and ranches became smothered, plowed or overgrazed, there existed in this region abundant fine grasses. These grasses, which were very much at home here, were mostly overlooked. These low-maintenance native grasses were not considered alternatives. As a lawn, bluegrass alone was the alternative. It was ill-chosen.

The better choices are buffalo grass and blue gramma. These are warm season plants and they should be seeded this month. The soil should warm enough in May to aid germination, and the long growing season that lies ahead will allow the new lawn to become adequately established before winter.

The primary native grass for Colorado lawns is buffalo grass, *Buchloe dactyloides*. Soft sage or mint green in color, it makes a beautiful sod, rooting frequently along its spreading surface and underground runners. It forms a dense turf that withstands foot traffic. It can be mowed neatly, though it doesn't grow fast enough to justify a regular Saturday morning ritual.

The other major short grass suitable for lawns is blue gramma, *Bouteloua gracilis*, native to the High Plains. A bunch grass, it grows to a natural height of about one foot. Though seldom used by itself, unblended with buffalo grass, it too can be mowed and kept as a groomed lawn. Mowing encourages it to spread and form a sod. It is free of pests and diseases and is tolerant of our arid climate. In the foothills and elsewhere above 7,000 feet it surpasses buffalo grass in endurance.

Its fine blue-green leaves are but one of its admirable features. If allowed to mature to its full height in a meadow or prairie landscape, blue gramma holds its flowers and seeds in gracefully arching flaglike heads that persist throughout the winter.

To form the ultimate in adaptable, drought-resistant, low-maintenance lawns for our region, buffalo grass and blue gramma may be blended. They require little attention after their first year and by their third year they will thirst for only about a third of the water needed by bluegrass turf. In fact, they will usually thrive on the

moisture provided by the natural precipitation of the High Plains. They are, after all, natives and they've grown here for millennia without irrigation. To help them live up to their potential as a domesticated landscape feature, however, they will need supplemental soaking during long periods of drought.

The actual work of installing a lawn of buffalo grass, blue gramma or a blend of the two requires no more effort than putting in a lawn of bluegrass. In fact, some shortcuts may be possible.

First, of course, some design considerations. These will be highly personal choices and can't be fully addressed here. Remember, though, that these plains grasses thrive best in full sun and are at their healthiest when they're not overwatered. Trees, shrubs and flowers that are incorporated in the lawn (or meadow) or that border the lawn should be chosen with these characteristics in mind.

Direct seeding is the usual method for starting these grasses. Although care must be taken during this process, it will be seen that this takes less time, water and effort than for a bluegrass lawn. The price of seed for these grasses has risen sharply in recent years because of the demand for reclamation seeding in plowed, erodible lands in the northeastern part of the state. The quality of the resulting lawn, though, will make the initial cost insignificant.

Before direct seeding, the soil must be prepared to a fine tilth. During this process organic matter may be added but if the soil has previously been under cultivation it should not be necessary. Buffalo grass and blue gramma are tolerant of both clay and sandy soils. Very deep tilling is neither necessary nor desirable; the deeper the soil is turned, the more weed seeds that may be brought to the surface to germinate.

Three to four pounds of seed should

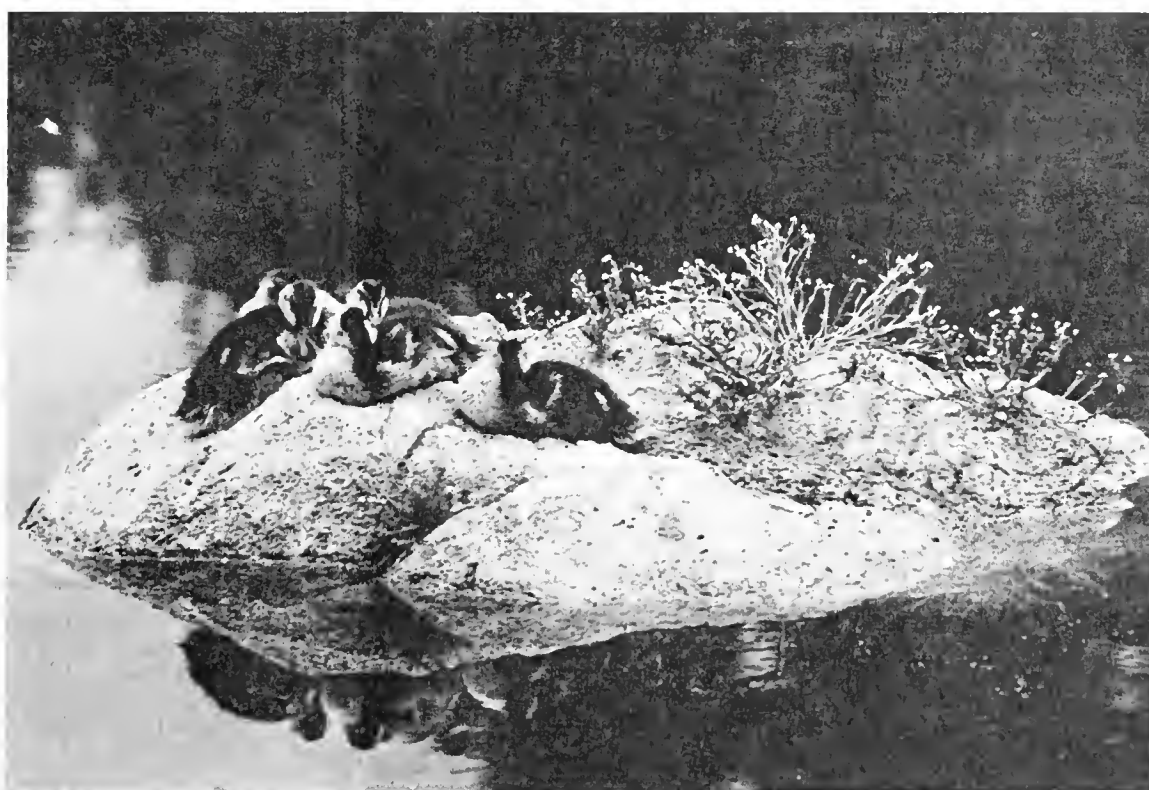
be evenly spread per 1,000 square feet of lawn area. This may be done using bi-directional hand broadcast or a mechanical grass seed spreader. Use only treated buffalo grass seed that has undergone a process to improve germination. Untreated seed germinates erratically over a period of several years. Ideally, the seed should be planted to a depth of one-quarter to one-half inch. This is difficult to gauge, however. It is sufficient to rake the seeded area lightly, incorporating the seed with the fine soil particles, then to roll the soil with a heavy lawn roller.

The grass seeds will germinate only if kept constantly moist. Frequent light watering, taking care that washing or puddling don't occur, is essential and is preferable to infrequent deep watering. Fortunately, at this season both grasses germinate within five to seven days, less than half the period required for bluegrass, so this crucial stage is soon over.

During the first year of growth a native lawn may need weekly watering once the seeds have germinated. The first crop of weeds that germinate with the grass should be eliminated by hand, though once the grass has matured the broad-leaved weeds may be sprayed with a suitable herbicide. Whether the ultimate purpose is a groomed or ungroomed lawn, the grass should be mowed when it has reached three inches to increase tillering (spreading by basal shoots) and thickening of the turf.

It can be seen that the initial cost for a native lawn is not prohibitive for most homes. Over the years these costs will be repaid many times through water, work and problems saved. There is also the matter of suitable beauty. These grasses both look and act at home here. That's because they are.

Larry Latta
Botanist-Horticulturist
Denver Botanic Gardens



Watch for the return of the ducks during May.

C MAY

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
		1	2	3	4	5	6
	*First meeting of a class with more than one session	Free Day at Denver Botanic Gardens		Lehnert Duo Concert			
	7	8	9	10	11	12	13
			Basketry Techniques		Pre-Sale Party	Plant and Used Book Sale	Plant and Used Book Sale, Wildflowers of the Plains Field Trip
	14	15	16	17	18	19	20
	Japanese Tea Ceremony		A Day of Discovery	Botany for Beginners*			Ikebana International Show, Japanese Tea Ceremony
	21	22	23	24	25	26	27
	Ikebana International Show			Watercolor Painting*			
	28	29	30	31			
	Denver Rose Society: Old Garden Roses, Ecology and Flora North Table Mtn.						
	Coming Next Month		June 14 Extended Evening Hours: "Japanese Festival"	June 18 Japanese Tea Ceremony	June 20 A Day of Discovery	June 24 Terrace and Garden Tour	June 27 Young Audiences Concert
	June 3 Mushroom Identification,* Watercolor Workshop	June 11 Japanese Tea Ceremony, Water Garden Society Sale	June 17 Japanese Tea Ceremony	June 17-18 Rocky Mtn. Bonsai Society Exhibition	June 22-23 Paragon Ragtime Orchestra	June 26 Brontosaurus Brunch*	June 28 Watercolor Workshop, Photography Botanical Illustration Field Trip
	June 3-4 Iris Show & Sale						

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909 York Street
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Address correction requested

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May 1989



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Terrace and Garden Tour Features University Park Gardens

The Terrace and Garden Tour will be held earlier than usual this year: Saturday, June 24. This annual event, sponsored by the Denver Botanic Gardens Guild, helps support such Gardens activities as the summer college internship program.

Gardens of the University Park area will be featured. Located near Denver University in the south-central part of the city, this neighborhood is partially comprised of elegant Victorian homes and attractive bungalows. You'll enjoy early summer garden displays ranging in age from newly landscaped to stately and established.

Two older yards in the tour, along the edge of Conservatory Park, will feature shade gardens. Beneath their tall trees especially selected plant material thrives, even with little sun. Another house offers an answer to a different problem, one of particular importance in our Denver climate: With a new landscape by noted designer Allan Rollinger, it features the practical and attractive techniques of Xeriscaping.

Tickets are available at the Denver Botanic Gardens Gift Shop and from members of the guild. Each ticket will have a list of the gardens to be visited, their descriptions, a map of the area, and the hours of the tour. The price this year is \$6 for adults; there is no charge for children under 12.

Green Thumb

NEWS

Denver Botanic Gardens

June 1989

Number 89-6

DBG Hosts Garden Writers Association of America Rocky Mountain Conference

Denver Botanic Gardens will host the Rocky Mountain Conference of the Garden Writers Association of America at the Warwick Hotel July 19 to 22. This meeting of horticultural communicators will bring writers, lecturers and educators together to discover the special beauty and uniqueness of Rocky Mountain horticulture. Members of the Gardens are welcome to participate in this conference. Registration information is included at the end of the program provided in this article.

Lectures and field trips covering some of the region's best public and private gardens will be highlights of this conference. Timed to coincide with the peak of the summer flowering period in the high country, trips to Mount Goliath and to Vail, Colorado, will demonstrate what intense sunlight can do for flowering plants. A special program on wildflower photography will help participants capture the rugged grandeur of the Rocky Mountains on film.

continued on page 5

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page 3

Young Audiences Concerts
page 3

Wildflower Photography Lecture and Workshop
page 9



Summer evenings and soft lights go hand-in-hand at the Gardens.

Escape to Your Gardens: A Japanese Festival

Again this summer the Gardens has lined up a series of evening activities, especially designed for families, to give you another reason to "Escape to Your Gardens." The first of these exciting evenings is Wednesday, June 14, when we'll celebrate a "Japanese Festival" with music, dancing and folk tales.

Japanese players have graciously accepted an invitation to perform traditional music of Kyoto in the Japanese Garden. Folk dancing will be demonstrated in the amphitheater, with the hope that you will join in for a few lessons. The Helen Fowler Library will be the setting for Japanese storytelling.

All events are free after admission to the Gardens, and the regular gate fee will be in effect. The Gardens will be open until 8 p.m., providing plenty of time for a picnic supper and a leisurely stroll in the twilight.

This is a wonderful opportunity to bring your non-member friends for a pleasant summer evening amid the Gardens' early-summer beauty.

A Day of Discovering Japanese Horticulture

The "Days of Discovery" series at the Gardens continues Tuesday, June 20, with A Day of Discovering Japanese Horticultural Arts. Free lectures at 10:00 a.m. and noon will introduce you to Japanese flower arranging techniques and Japanese garden design. A free tour of our Japanese garden "Shofu-En," Garden of the Pine Winds, will illuminate the landscaping lecture.

No preregistration is required for these events, but attendance may be limited by space. Call the Gardens at 331-4000, extension 24, for information.

1988 Annual Report

The unabridged *Denver Botanic Gardens 1988 Annual Report*, excerpts of which are printed in this issue of the *News*, is available to all members upon request.

The report highlights the Gardens' long-held interest in wildflowers. Also included is a review of the year's activities; the financial statement for 1988 and its analysis by Treasurer of the Board of Trustees Donald K. Dodge; complete lists of benefactors, trustees and staff; and a directory of all Denver Botanic Gardens facilities.

Call the development department at the Gardens for your free copy (331-4000, extension 14).

The Bonsai Show will be held June 17 and 18.



Bonsai Exhibit on Father's Day Weekend

During the weekend of June 17 and 18 the Rocky Mountain Bonsai Society will present its annual exhibition at the Gardens. On display will be hundreds of bonsai — beautiful, old, expertly trained specimens for which the Denver-based society has gained its national reputation.

This year the exhibition will overflow from John C. Mitchell II Hall into the Lobby Court area where experts will demonstrate horticultural techniques for growing bonsai. In the hall, society members and video cassettes will offer non-stop information on the art of bonsai, and a special presentation on Japanese flower arranging will be given Saturday at 2 p.m. by Mrs. Daniel Wittgartner, president of the Denver Chapter of Ikebana International.

At 8 o'clock Saturday morning, before the exhibition opens to the public at 10, the bonsai society will provide an individually guided showing for the blind. The exhibit will remain open Saturday evening until 8 to accommodate the Gardens' evening visitors. On Sunday the show will open at 9 a.m. and will end at 4:45 p.m.

There is no charge for the bonsai exhibition or demonstrations beyond the Gardens' regular entrance fee of \$4.00; adults 65 and older and children aged six to 16 enter for \$2.00 and children under six are admitted without charge. For more information call the Gardens at 331-4000, extension 24, or contact exhibition chairman John Gay at 650-0502.

Tributes

In memory of Maude Castle
Mile-Hi Mechanical, Inc.

In memory of Mrs. J. Donald Deane
Mr. & Mrs. William S. Falkenberg

In memory of Ellen Embree
Mr. & Mrs. William Grant

In memory of Dr. Giles Filley
Philip & Lynette Emery

In memory of David Jepson
Dr. & Mrs. William Moon, Jr.

In memory of Roberta McDougal
Mr. & Mrs. Clayton G. Dorn

In memory of Emma Mixa
Bernice E. Petersen
Helen M. Zeiner

In memory of Frances P. Sargeant
Melanie Grant
Mr. & Mrs. William Grant

In memory of Robert H. Waterman
Mr. & Mrs. Barkley L. Clanahan

Green Thumb News Number 89-6 June 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than May 19 for July, June 20 for August and July 20 for September.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, extension 20, for details.



Accredited by the
American Association
of Museums

ListenUp Garden Concert Season Begins June 22

A summertime tradition, the concerts at Denver Botanic Gardens, begin this month with two evenings of great turn-of-the-century American music with the Paragon Ragtime Orchestra.

A new sponsor, ListenUp Audio/Video, joins KCFR-FM and the Gardens to provide this diverse series of musical entertainment. Enclosed in the May newsletter was a brochure with details on how, when and where to purchase tickets by mail, phone or in person. Tickets will be available at several outlets throughout the metro area and will be sold one concert at a time. Mail orders for tickets must be received no later than June 14. Ticket costs will vary with each concert and there will be a small service charge for each transaction.

Let the summer of fun begin with the following:

The Paragon Ragtime Orchestra

Thursday, June 22, or Friday, June 23 at 7:30 p.m. (Raindate: Saturday, June 24 at 10 a.m.)

Tickets: \$7 each (DBG/KCFR member price: \$5 each) Tickets go on sale at outlets starting June 5.

Hot Rize, Red Knuckles and The Tony Rice Unit

Thursday, July 6, or Friday, July 7 at 7:30 p.m. (Raindate: Saturday, July 8 at 10:00 a.m.)

Tickets: \$8 each (DBG/KCFR member price: \$6 each) Tickets go on sale at outlets starting June 26.

The National Repertory Orchestra

Thursday, July 20 at 7:30 p.m. (Raindate: Friday, July 21 at 7:30 p.m.)

Tickets: \$7 each (DBG/KCFR member price \$5 each) Tickets go on sale at outlets starting July 10.

Music from the Santa Fe Chamber Music Festival

Thursday, August 3 at 7:30 p.m. (Raindate: Friday, August 4 at 7:30 p.m.)

Tickets: \$8 each (DBG/KCFR member price: \$6 each) Tickets go on sale at outlets starting July 24.

The Dirty Dozen Brass Band

Thursday, August 17, and Friday, August 18 at 7 p.m. (Raindate: Saturday, August 19 at 10:00 a.m.)

Tickets: \$7 each (DBG/KCFR member price: \$5 each) Tickets go on sale at outlets starting August 7.

Judy Collins with JoAnn Falletta and The Denver Chamber Orchestra

Thursday, August 31, or Friday, September 1 at 7 p.m. (Raindate: Saturday, September 2 at 10 a.m.)

Tickets: \$12 each (DBG/KCFR member price: \$10 each) Tickets go on sale at outlets starting August 21.

The concerts are for your enjoyment and they benefit both the Gardens and KCFR-FM. The gates open 90 minutes before showtime. The west gate will be open during concerts and parking in designated areas of Cheesman Park will be allowed on concert evenings. Additionally, buses will shuttle concertgoers from the parking lot of Calvary Temple to the Gardens beginning at 5 p.m. This information will be provided with your tickets.

Raindates are scheduled for each performance so, if bad weather threatens, listen to KCFR-FM, 90.1, beginning at 4 p.m. For additional ListenUp Garden Concert information call 744-9999.

Young Audiences Concerts for Children

"Blossoms, Beauties and Ballets" opens the 1989 Young Audiences series at Denver Botanic Gardens.

"Blossoms, Beauties and Ballets" will incorporate several ballets for children including "Beauty and the Beast." Since 1985 Young Audiences and

Denver Botanic Gardens have been combining efforts to create magic for young children at the Gardens. This year Pace Membership Warehouse, Inc., will also help create a special world of magic for the young concertgoers as a sponsor for the series.

This year's program includes:

Blossoms, Beauties and Ballets
Tuesday, June 27

Raindate: Sunday, July 2

Movement, Myths and Masks
Tuesday, July 11

Raindate: Sunday, July 16

Rock, Rocka, Rockadiles

Tuesday, July 25

Raindate: Sunday, July 30

Evening concerts begin at 6:30 with open seating available 45 minutes beforehand. Raindate performances begin at 10:00 a.m.

Tickets will be available at The Wizard's Chest in Cherry Creek, Alfalfa's Market (5910 S. University Blvd., Denver, and 205 Canyon Blvd., Boulder) during regular store hours and at Denver Botanic Gardens. Sales will begin at all outlets, except the Gardens, on June 1. Ticket sales (if any tickets remain to be sold) will be conducted at the Gardens one week prior to each concert date at the Denver Botanic Gardens House, 909 York Street, between 8 a.m. and 5 p.m.

Tickets are \$4 each, with children under age two free. Call 825-3650 to purchase tickets with VISA, MasterCard or Choice. A dollar service charge will be added to each phone order.



Hot Rize performs at the Gardens on July 6 and 7.

Evening Hours

From Memorial Day through Labor Day the Gardens will be open three evenings a week so members may enjoy their favorite getaway after the sun has sunk lower in the warm afternoon sky. On Wednesdays, Saturdays and Sundays the hours are 9 a.m. until 8 p.m.

Member-Get-A-Member Contest

Share your excitement about the Gardens!

We urge you to have your friends apply for a membership using the applications in the flyer you received in the mail. This flyer provides details for our summer membership contest.

There will be gift certificates for all members who help bring new members to the Gardens and there will be some great prizes for the members who bring in the most new members!

Feel free to make copies of the application or ask for additional copies at the information desk in the lobby!

Guild Open House in Herb Garden

The Herb Garden, which they helped to create and which they tend with thousands of volunteer hours each year, will be the scene of an open house by members of the Denver Botanic Gardens Guild on Wednesday, June 28, from 5 until 7 p.m. This will be during one of their regular summer evening "dig-ins," when guild members who are unable to attend during the day gather to work in the garden.

Refreshments will be served during the open house, and guild members will operate an information center in the Herb Garden gazebo to acquaint visitors with the guild and its work at the Gardens.

An integral part of the Gardens' volunteer and fund-raising programs, the guild not only plants and maintains the Herb Garden but supplies and sells herb plants at the annual Plant and Used Book Sale and makes secret-recipe herb vinegar for the holiday Gift Shop sale.

The guild meets at 9 a.m. on the second Wednesday of the month from September through June in the Morrison Horticultural Demonstration Center on 11th Avenue across from the York Street gardens.

For more information on the open house call the Gardens' information officer at 331-4000, extension 24, or Lynn Dexter of the guild, 753-0235.

Enjoy evening hours at the Gardens this summer.



Fun-Filled Day for Members at Chatfield Arboretum

On July 16, DBG members will have the opportunity to enjoy a Sunday evening at Chatfield Arboretum. This for-members-only event includes a variety of fun-filled activities.

Bring a blanket or folding chairs, a picnic supper, barbecue tools (if you plan to use the grill provided by Chatfield Arboretum), and enjoy a pleasant evening picnic. Soft drinks and cake will be provided. Beginning at 4 p.m., tours led by volunteer guides will take small groups through the newly developed trails and wetlands of the Arboretum. Or you can introduce yourself to the Arboretum and stroll the self-guided nature trails. Children of all ages will enjoy a

hayrack ride around the area.

To ensure a spot for yourself and family (if members), return the attached reservation form as soon as possible. The cost is \$4.00 to cover expenses (children under 12 are free). Upon receipt of your reservation and check, a confirmation card will be mailed to you. This card will serve as your ticket and is to be turned in at the entrance to Chatfield Arboretum.

The arboretum is located in the far southwest metro-community. Take C-470 west to the Wadsworth exit. Turn left and go beneath the underpass 0.4 miles on the left. The schoolhouse is 0.5 miles farther and you can park in the nearby lot.

Members' Day at Chatfield Arboretum Sunday, July 16 4-8 p.m.

Enjoy

Nature trail for hiking
Guided tours
Hayrack ride
Entertainment
Soft drinks and cake

Please bring

Picnic supper
Barbecue tools
(if using the grill)
Folding chairs or blanket
(No pets allowed)

Members' Day at Chatfield Arboretum Reservation Form

This is a members-only introduction to Chatfield Arboretum. Reservations are for _____ adult(s) at \$4.00 each, and _____ child(ren) under 12 years old are free. Enclosed is a check for \$_____.

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone Number _____

Mail reservation by July 5 to: Members' Day at Chatfield Arboretum
Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

You will receive a card confirming your reservation and it is to be turned in at the entrance to Chatfield Arboretum.

Down the Garden Paths in June

A visit to the Gardens in early June is an absolute must, if only to savor the sumptuous opulence of the tall bearded iris in their display garden south of Marnie's Pavilion. The mouth-watering richness of these ultra-modern hybrids is nearly a gustatory experience, since it is enhanced by the aroma of grape, raspberry and clove that some of the blossoms exude. Bring your camera. You may not be able to capture the scents, but your photos will sparkle with colors that are nothing less than luscious.

Perennials, such as iris, are the mainstay of the June garden. Along



the pathway leading south from the main lobby entrance are the mixed perennial borders. Designed to offer a colorful stroll throughout the warmer months, it nevertheless is at its peak during June.

Arranged in a style reminiscent of the classic English garden, the variety of plants here forms small scenes that flow together to create colorful foregrounds for vistas of Botanic Gardens House to the south and, to the north-west, the conservatory. Framed by the flowers of *Dictamnus albus* (gas plants), centurias, tall phlox, sea lavenders and other perennials, some of your most memorable pictures of the Gardens will be taken from this walk.



Conference

continued from page 1

This conference provides an excellent opportunity to meet with well-known garden communicators, both local and national. The program begins on Wednesday, July 19, at 5 p.m. with registration and a get-acquainted reception at the Warwick Hotel and proceeds through Saturday with a trip to Mount Evans scheduled to leave Saturday morning returning by 4 p.m.

Program

Wednesday, July 19, 1989

5 to 8 p.m. — Registration and get-acquainted reception at the Warwick Hotel.

Thursday, July 20

9 a.m. to noon. — "What is Rocky Mountain Horticulture?" at the Warwick Hotel, 1776 Grant Street, Denver

Listen to informative programs about gardening in the West presented by enthusiastic Western gardening experts and featuring GWAA Quill and Trowel Award Winner John Cretti. A special session on wildflower photography will sharpen your field skills.

12:30 to 1:30 p.m. — Lunch at the Warwick Hotel

3 to 9 p.m. Travel to Denver Botanic Gardens to tour and photograph the facilities.

Staff members and guides will be stationed throughout the grounds and greenhouses to answer your questions.

5:30 to 6:30 p.m. — Cocktail reception at the Botanic House, DBG

6:30 to 8:30 p.m. — Picnic supper and outdoor concert in the Amphitheater of the Gardens.

Listen to the National Repertory Orchestra perform as the sun sets over the Rockies.

Friday, July 21

7:30 a.m. — Travel to Vail for the day to tour public and private gardens, talk to local gardening experts and sightsee.

Vail is known for more than skiing. The Gore Mountain Range creates a spectacular setting and the streets of the village are enhanced by thousands of brilliant annuals and perennials.

After a welcome by former First Lady Betty Ford, participants will tour the Betty Ford Alpine Garden, visit noteworthy private gardens in town and travel to nearby Beaver Creek. Following a short ski lift ride halfway up Vail Mountain, savor an outdoor luncheon barbecue amid a blooming mountain meadow.

Time will be provided in the afternoon to photograph gardens of Vail, talk to local gardening experts or sightsee and shop before leaving for Denver at 4 p.m.

Saturday, July 22

7:30 a.m. Travel to Mount Evans for a guided field trip to see tiny flowering alpine and gnarled bristlecone pines.

In the 90-minute drive from Denver to the high slopes of Mount Evans expect to cross all the ecological zones encountered on a journey to the North Slope of Alaska. See some plants at Summit Lake that grow in both states but nowhere in between. Walk down the 1.5-mile M. Walter Pesman Trail and become acquainted with over 50 species of Colorado alpine nestled among ancient, wind-twisted bristlecone pines. Enjoy a picnic lunch on the shores of Summit Lake. Don't forget to bring a camera. Return to Denver by 4 p.m.

Cimicifuga racemosa, an attractive perennial for the border.

Garden Writers Association of America

Registration Form

Registration, including three lunches, two cocktail receptions, one dinner, concert ticket and transportation to Vail and Mount Evans is \$125 if postmarked by June 8. After that date the registration fee is \$140.

Please make your check payable to Denver Botanic Gardens and mail your registration to GWAA Rocky Mountain Conference, Denver Botanic Gardens, 909 York Street, Denver, CO 80206.

Name (as you want it on your nametag) _____

Affiliation (also for your nametag) _____

Address _____

City _____

State _____

Zip _____

Daytime Telephone _____



Field Trip to Rocky Mountain National Park

Saturday, June 17
10 a.m. to 3 p.m.

Explore the rich woods surrounding two of the prettiest, most accessible lakes in the park. Participants will see various members of the heath family such as pyrolas and winter-greens that are at home in the moist areas of the subalpine forests.

The leader is especially fond of the wild orchids, and with luck the group should find several of these, including the elusive little purple lady's slipper, *Cypripedium fasciculatum*. Don't forget your lunch.

Leader: Dick Schwendinger

Meet: promptly at 10 a.m. at the Moraine Park Visitor Center. Please call the education department at 331-4000, extension 20, if you need directions. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

Fee: \$5 members/\$5.50 non-members

Limit: 15

Plant Life Field Trip: Mount Falcon Park, Jefferson County

Wednesday, June 21
9 a.m. to 4 p.m.

Mount Falcon Park is located just outside Morrison, Colorado, on Indian Hills Road (Parmalee Gulch Road). Numerous trails lead to scenic vistas and the early summer wildflowers here are especially plentiful.

Larkspurs, blue mist penstemons, and orange meadow arnicas are all expected to be blooming in profusion. Bring a sack lunch.

Leader: Peter Root is an amateur botanist who volunteers regularly at the Kathryn Kalmbach Herbarium at DBG. He is also a volunteer naturalist at Roxborough State Park.

Meet: promptly at 9 a.m. in the main DBG parking lot to carpool and receive directions.

Fee: \$2 per person

Limit: 20

Field Trip to Chatfield Arboretum

Saturday, July 1
9 a.m. to noon

The tour follows Deer Creek as it empties out on to the plains and meanders through the riparian community of the arboretum. Deer Creek is lush with chokecherry, catnip, wild grape and a variety of composites. Explore the three ponds of the wetland community and be prepared for some avian surprises.

Wear sturdy walking shoes and dress for changes in the weather. Take drinking water, camera and binoculars if you wish and a picnic lunch. Picnic and restroom facilities are available.

Meet: in the visitor center promptly at 9 a.m. Take C-470 west to Wadsworth exit. Turn left and go beneath underpass 0.4 miles to Deer Creek Road. Turn right and the Arboretum entrance is 0.4 miles on the left. The visitor center is 0.5 miles farther.

Leader: Frank Shupe is a retired Denver school science and art teacher who enjoys leading nature field trips. He has been a field trip leader at Roxborough State Park since 1982 and currently leads and coordinates field trips at Chatfield Arboretum.

Fee: \$5 members/\$5.50 non-members

Limit: 20

Alpine Ecology

(two sessions: lecture and field trip)

Wednesday, July 5 from 7 to 9 p.m.
in Classroom A

Saturday, July 8 from 7 a.m. to 5 p.m. Field Trip

The treeless tundra dominating the landscape above timberline is actually a kaleidoscope of 20 or more separate plant communities in their unique ecological niche. The communities range from the windswept fell fields, harboring cushion plants such as moss campion and nailwort, to the black sedge-marsh marigold wetlands.

This course introduces the student to the ecology of this unique but abundant Colorado Rocky Mountain habitat with a single lecture followed by an all-day field trip to Hoosier Pass above Breckenridge.

Instructor: Paul Kilburn, Ph.D.

Fee: \$15 members/\$16.50 non-members

Limit: 15



1988 Report to Members



Our Native Flora

Denver Botanic Gardens was founded on a love for the native plants of Colorado and the Rocky Mountain West.

The enthusiastic group of civic leaders, horticulturists and botanists who joined in 1951 to establish the Gardens envisioned a botanic institution that would engage in the discovery of native plants and their identification, conservation and introduction into the horticulture of the region.

In 1988 Denver Botanic Gardens renewed, continued and intensified its commitment to research in wild flora. The love of wildflowers and the desire to share our affection for them set the course for a year of gratifying, successful activity.



President's Report

1988 was an outstanding year for Denver Botanic Gardens, primarily because of the positive steps we took to strengthen its organization.

We were fortunate to receive a pro bono study of board-management relations by McKinsey and Company of New York City, who had previously done a similar consultation for The New York Botanical Garden. This study and its report have resulted in major changes for both the board of trustees and the management staff at the Gardens.

Among these changes were the restructuring and the redefinition of board committees; the beginning of a three-year planning process for all departments; changing personnel and activities in the education, development and plant collections departments; and the formulation of long-term plans to enhance our gardens and our programs.

The Boettcher Foundation challenge grant, which spurred the Gardens to raise \$2 million to match the foundation's gift of \$1 million for the general endowment fund, was completed successfully, thanks to the extraordinary leadership of former board president Lawrence Long. We must realize that this is only the beginning of what will be a continuing effort to build our general endowment. But the base we've built will encourage future gifts to the Gardens' endowment funds, as well as to the general operating fund.

An extremely important event in 1988 was the creation of the Scientific and Cultural Facilities District. This tax district was conceived in 1986 by another former board president, Edward Connors, and it was through his unwavering dedication that the issue was placed on the ballot and passed overwhelmingly in all six counties involved. Acceptance of the tax increase, as small as it is, certainly indicates strong support by the public for our cultural agencies.

Creation of the district means that we shall begin to receive a share of its revenue in 1989, allowing us to restore the Gardens to its former beauty and level of maintenance. It also means that we can finally add the employees we need to lighten the duties of our presently overworked, dedicated staff members.

The facilities district issue was successful because of the incredible efforts of many groups associated with the major cultural institutions, but I'd like especially to thank our staff, our board members and our many volunteers who worked for its passage.





Beatrice B. Taplin, President, Board of Trustees. A trustee of the Gardens for 10 years, Mrs. Taplin has also served on the directorial boards of the University of Colorado Foundation, Children's Hospital, the Denver Symphony Orchestra and the Four Mile Historic Park, as well as on the Denver Regional Council of Governments.

Thanks to the interested involvement and dynamic leadership of Denver Parks and Recreation Manager Don and Carolyn Etter, our traditional relationship with the City and County of Denver has continued to be a close one. I am confident that the city will maintain or even surpass its current level of financial support for the Gardens.

As 1988 came to a close, Denver Botanic Gardens remained a major force in the metropolitan Denver community. It's interesting to note that gardening has become the number one leisure-time activity for Americans, which means we will have increasing opportunities and responsibilities to serve the public.

Elsewhere in this annual report you will read of the outstanding successes of Plant and Used Book Sale Chairman Jeanne Ruggles and her dedicated volunteers, of our fantastic

Garden Concert series supported by United Bank of Denver and of many other wonderful activities of the Gardens. We are a source of pride and enjoyment for Denverites. We offer educational opportunity for its residents and delightful diversion for tourists. I take this opportunity to thank everyone who has been involved this year in this lovely, important asset of our city.

Beatrice B. Taplin

Beatrice B. Taplin
President, Board of Trustees
Denver Botanic Gardens

Treasurer's Report

Denver Botanic Gardens had an excellent fiscal performance in 1988, posting another modest operating surplus while further building its strong asset base. Significant achievements were made while operating with budget constraints and a continuing sluggish local economy.

Unaudited year-end financial statements reported total assets of \$5,296,135, a growth of some 27 percent over year-end 1987. Liabilities, as in the past, were minimal at \$17,904. The impressive asset growth is primarily due to the \$915,854 increase in the general endowment fund, which at year's end, 1988, totaled \$3,923,657.

Operating income for 1988 was \$998,451 against expenses of \$989,732, leaving a surplus of \$8,719. This surplus was achieved through a lean and well managed operation, keeping expenses at 92 percent of budget. Income in 1988 was up \$59,625, or six percent over 1987, and was primarily fueled by income from the Plant and Used Book Sale, development

activities, membership growth, and increased investment income. Specifically, investment income at \$214,611 was some \$49,000 above budget due to the higher interest rates and significant growth in the endowment fund. Needless to say, the general endowment fund is vital in providing interest income to the Gardens, and the fund is projected to reach \$4.7 million at the conclusion of the current campaign.

Denver Botanic Gardens remains well positioned for the future and is optimistic about a slowly improving local economy. Budget and program expansion is planned in 1989 as new funds from the Scientific and Cultural Facilities District tax become available and as continued higher interest rates increase our income from investments.



Donald K. Dodge
Treasurer, Board of Trustees
Denver Botanic Gardens

Financial Statement

December 31, 1988

Assets

Current Assets

	1988	1987
Cash	\$ 116,499	\$ 59,628
Cash Equivalents	1,733,960	1,626,418
Accounts Receivable	321,993	394,170
Total Current Assets	\$ 2,172,452	\$2,080,215

Other Assets

Investments	\$ 2,428,785	\$1,588,736
Real Estate & Water Rights	542,658	362,658
Trusts	152,241	152,241
Total Other Assets	3,123,683	2,103,634

Total Assets	\$ 5,296,135	\$4,183,849
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Liabilities

Accounts Payable	\$ 15,553	\$ 38,542
Security Deposits	2,225	2,360
Deferred Income	127	0
Total Liabilities	\$ 17,904	\$ 40,902

Liabilities and Fund Balances

Fund Balances

Endowments	\$ 3,923,657	\$3,007,803
Capital Additions	238,793	160,155
General Operating	666,194	689,885
Operating Project	449,587	285,103
Total Fund Balances	5,278,230	4,142,947

Total Liabilities and Fund Balances	\$ 5,296,135	\$4,183,849
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Note: This is the unaudited balance sheet for fiscal year January 1 - December 31, 1988.



Merle M. Moore, Executive Director. The Garden's October tour to China gave Mr. Moore (center) the opportunity to meet with staff members of the Beijing Botanical Garden.

To stabilize the Gardens' base of financial support, allowing the Gardens to bring its physical plant, programs and collections maintenance back to the standard of quality and excellence that earned the Gardens, in 1984, its accreditation by the American Association of Museums.

To enhance Gardens programs and collections to better serve citizens within the entire metropolitan district.

For us to accomplish these important objectives, several things need to happen. Underway is an assessment of the Gardens' current programs and collections to find the best means of extending the Gardens' influence into the six-county metropolitan district. We will be working closely with representatives from each of the counties to accomplish this.

The City and County of Denver must continue its current direct support of the Gardens by appropriating annual operating funds. Without such a commitment by the city, SCFD funds will simply replace current city dollars. This is clearly not what the voters intended when they approved the new district.

In addition, we need the ongoing, generous support of our members and other donors. Continuing this flow of gifts to

the annual campaign, the endowment fund and other programs is vital if we are to not only maintain but enhance this world class botanic garden of which we are so proud.

With such continuing support, the Gardens will be able to use effectively the Scientific and Cultural Facilities District funds for the purposes we promised, and we'll become an even more important cultural and scientific asset to our community, the region and the nation.

Merle M. Moore
Executive Director
Denver Botanic Gardens

Field Trip to Golden Gate Canyon State Park

Saturday, July 8
10 a.m. to 3 p.m.

This park contains the best array of foothills wildflowers in the Denver vicinity. Many summer flowers will be blooming.

Join us on a leisurely walk in the Old Barn Knoll area and brush up on your identification skills. Don't forget your picnic lunch.

Leader: Dick Schwendinger has been leading field trips throughout North America and Alaska for over 25 years.

Meet: promptly at 10 a.m. at the park's Nature Center. (Call the education department at 331-4000, extension 20, if you need directions.)

Fee: \$5 members/\$5.50 non-members. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

Limit: 15

Birds of Chatfield Arboretum

Monday, July 10
8 to 11 a.m.

Chatfield Arboretum's newly developed wetland has been attracting some interesting birds including the great blue heron. A recently formed bird watching group at the arboretum, the Tuesday Birders, has reported sightings of 150 species.

On this easy one-mile walk expect to see a great horned owl, warblers, hawks, a large variety of waterfowl and a colony of swallows.

Bring binoculars, drinking water,



field guide, sturdy shoes, insect repellent and be prepared for weather changes. You might wish to bring your camera. Long pants are strongly encouraged. Following the trip students are welcome to remain at the arboretum's picnic facilities to enjoy their brown bag lunches.

Meet: at the arboretum's visitor center promptly at 8 a.m. Take C-470 west to Wadsworth exit. Turn left and go beneath underpass 0.4 miles to Deer Creek Road. Turn right and the arboretum entrance is 0.4 miles on the left. The visitor center is 0.5 miles farther.

Leader: Ann Bonnell is a founding member of the Tuesday Birders, a member of Denver Field Ornithologists and Audubon Society. She has led field trips for Denver Audubon Society and Denver Museum of Natural History.

Fee: \$5 members/\$5.50 non-members

Limit: 20

Tundra Trip to Corona Pass

Saturday, July 15
8 a.m. to 4 p.m.

Visit one of the most spectacular passes in the Front Range. Observe tundra ecology and many different wildflowers as well as man's influences. Follow the abandoned railroad to the hotel on top, look at ancient Indian game drive fences and see gas pipeline revegetation in this high altitude environment.

The abundant wildflowers found here include paintbrushes, early gentians, miniature clovers, alpine avens and snow buttercups.

Don't forget your lunch and rain gear; bring a hand lens and plant books if you have them.

Instructor: Paul Kilburn, Ph.D.

Meet: promptly at 8 a.m. at the northeast parking lot of the Rock Cut (I-70 at Exit 259).

Fee: \$5 members/\$5.50 non-members

Limit: 18

Field Trip to Mount Goliath

Saturday, July 29
8 a.m. to 3 p.m.

Tundra flowers hold a special fascination for both amateur and professional botanists. Mount Goliath is an exceptional place to observe them. Carpets of dainty wildflowers are complemented by grand mountain vistas and the sculptured, grizzled beauty of the bristlecone pines.

Join two experienced field trip leaders and walk the M. Walter Pesman

Trail, a winding 1.5-mile downhill path at 12,100 feet.

Please bring your lunch, drinking water and jacket and wear comfortable walking shoes.

Leaders: DBG Assistant Director Andrew Pierce is an avid rock gardener and alpine plant enthusiast who has led many trips to Mount Goliath; Velma Richards is a botanist who volunteers regularly in our Kathryn Kalmbach Herbarium.

Meet: promptly at 8 a.m. in the main DBG parking lot.

Fee: \$15 members/\$16.50 non-members (includes Janet L. Wingate's illustrated brochure, *Wildflowers of Mount Goliath*, as well as bus transportation)

Limit: 43



Beginning Bonsai

(four sessions)

Wednesdays, June 21, 28, July 5,
(skip July 12), 19

7 to 9 p.m.

Classroom B

This introductory course will cover the history and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of bonsai will be included.

Each student will take a completed bonsai home and all materials will be provided.

Instructors: Keith Jeppson, past president of the Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 16 years. Harold Sasaki is a commercial bonsai grower with 18 years of experience. Both are lively, capable teachers with much experience.

Fee: \$54 members/\$59 non-members (includes \$22 for materials)

Limit: 16

8 Perennial Pleasures

(five sessions)

**Mondays, July 10, 17, 24, 31,
August 7**

6:30 to 9 p.m. Classroom C

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-session course that covers garden design, soil preparation and cultivation as well as a multitude of suggested plants.



Perennials for specialized situations such as shady areas will also be discussed. Students will meet in Classroom C and immediately proceed outside for a brief tour of the perennial border. There will be ample opportunity for questions.

Instructor: Andrew Pierce is a horticulturist and is Assistant Director of DBG. He is an accomplished grower of perennials and alpine plants.

Fee: \$50 members/\$55 non-members

Limit: 18

Perennial Garden Walk

Section I: Thursday, July 13

**Section II: Thursday, July 27
6-8 p.m.**

Each evening stroll through the perennial plantings at Denver Botanic Gardens will provide an opportunity to observe these marvelously versatile plants. An experienced perennial grower, Mr. Pierce will offer tips on growth habits and culture that you can incorporate into your own garden. An informal question and answer approach is planned.

Instructor: Andrew Pierce

Meet: promptly at 6 p.m. outside the Education Building.

Fee: \$5 members/\$5.50 non-members

Limit: 20

Herb Garden Walk

**Section I: Wednesday, July 19,
7 to 8 p.m.**

**Section II: Monday, July 24,
9:30 to 10:30 a.m.**

The aroma of an herb garden is second only to the flavors provided by the plants. On this walk participants will have an opportunity to learn more

about the many plants in DBG's own Herb Garden.

Meet: in the Gazebo located in the Herb Garden.

Leader: Lainie Jackson has been actively involved with the design, development and maintenance of DBG's popular Herb Garden since it was first planted. She is a member of the DBG Guild, a group whose support includes the Herb Garden.

Fee: \$4 members/\$4.40 non-members

Limit: 20

Scripture Garden Walk

**Section I: Thursday, August 10
10 to 11 a.m.**

**Section II: Tuesday, August 22
7 to 8 p.m.**

The Scripture Garden was designed to provide a visible link with the people and events of the Bible. Plants that grow in this garden are descendants of those that grew in the Holy Land thousands of years ago.

Leader: Gayle Weinstein is director of plant collections at DBG and oversees our plant collections.

Meet: at the Scripture Garden (rain or shine). Walks begin promptly.

Fee: \$4 members/\$4.40 non-members

Limit: 20

Design for the Urban Garden

(two sessions)

**Section I: Friday, July 28 and
Saturday, July 29
from 9:30 a.m. to noon**

**Section II: Friday, July 28 and
Saturday, July 29
from 1 to 3:30 p.m.**

Tour a handful of city gardens of stunning beauty whose owners have coaxed horticultural wonders from barren lots. These range from an intimate courtyard to a rambling cottage garden, and will excite new and experienced "green thumbs."

Dealing with shade, clay and other challenges, these gardens present possibilities for even (seemingly) hopeless sites. The focus will be on creating a personal and colorful garden with common and unusual perennials shrubs, bulbs, herbs and annuals. This popular class will focus on gardens different from those in 1988.

Meet: promptly at 9:30 a.m. or 1 p.m. at the main entrance to the Gardens to receive directions and carpool.

Instructor: Rob Proctor combines art and gardening in an interesting way. His award-winning urban garden is the inspiration for his botanical drawings. An internationally known watercolorist, Mr. Proctor is an art instructor at DBG and his work is currently exhibited at the Smithsonian Institution. His skills are in demand as a perennial garden consultant.

Fee: \$20 members/\$22 non-members

Limit: 12

Wildflower Photography Lecture

(one session)

Friday, June 9

7 to 9:30 p.m.

John C. Mitchell II Hall

Learn the art of wildflower photography from a nationally recognized expert. This comprehensive and beautiful presentation is open to wildflower lovers as well as photographers and will cover the following topics: finding flowers, selective gardening, plant protection, equipment, lighting, backdrops, uses of depths of field, filters, films, metering, composition and special effects.

Instructor: John D. Smithers is the owner of DeHart Media, an award-winning firm in Austin, Texas, and holds a master's degree in radio-television-film from the University of Texas. He serves as photographer and audiovisual producer for the National Wildflower Research Center.

Fee: \$10 members/\$12 non-members

Wildflower Photography Workshop

(two sessions)

Students must attend the lecture on Friday, June 9 from 7 to 9:30 p.m. and may choose either

Section I: Saturday, June 10

Section II: Sunday, June 11

6:30 to 11 a.m. and 6 to 9 p.m.

Learn the fine art of wildflower photography in this hands-on workshop. Participants will attend the Friday evening lecture and will then photograph flowers at Denver Botanic Gardens bright and early when the light is best on either Saturday or Sunday morning.

After their slide film is developed, students will reconvene for critiques in the evening. The instructor promises that this immediate feedback is a very effective learning tool that is also exciting and fun.

The following materials are required: one 35mm camera with a macro lens and a carrying bag, and one tripod, preferably one that can be lowered close to the ground. In addition, please bring these items, if you have them: normal, wide angle and telephoto lenses; ringlight or standard flash unit with remote sensor; 18 percent reflectant gray card; lens extension tubes or bellows; kneepads; small atomizer for spraying "dew" on flowers; polarizing and 81-A filters for your favorite lens; and a shutter release cable.

Please note that students should already have a good working knowledge of their camera.

Workshops are co-sponsored by the National Wildflower Research Center and Eastman Kodak Company, Professional Photography Division.

Instructor: John D. Smithers

Fee: \$60 members/\$66 non-members (this includes two rolls of 36-exposure slide film and processing)

Limit: 15 per section



Photography and Botanical Illustration Field Trip

Wednesday, June 28

8:30 a.m. to 4 p.m.

This is a field trip to the historic Evans Ranch, near Evergreen, for students of photography or botanical illustration. Established in 1868, this 3,200-acre ranch has a spectacular view of Mount Evans and a lush collection of mountain wildflowers. Beginners to experts are all welcome.

Wear sturdy walking shoes and remember to bring rain gear, a sack lunch, drinking water and our own drawing materials or photography equipment.

Suggested photographic equipment consists of: Kodachrome film (ASA 25 or 64), tripod and macro-lens or three-ring lenses. Suggested drawing materials are: drawing pad and pencils, magnifying glass and watercolors or colored pencils.

Meet: promptly at 8:30 a.m. in the main DBG parking lot to carpool.

Instructors: Bob Heapes is an experienced field trip leader, nature photog-

rapher and popular lecturer. Angela Overy received her National Diploma of Design and designed in London, New York and San Francisco before settling in Denver.

Fee: \$8 members/\$9 non-members

Limit: 15 photographers and 15 illustrators. Please identify on the registration form which category you are most interested in.

Watercolor and Pencil Techniques for Botanicals

(five sessions)

**Saturdays, July 8, 15, 22
(skip July 29),
August 5, 12**

1:00 to 3:30 p.m.

Morrison Center at Denver Botanic Gardens

Have you seen the Dutch Renaissance paintings of bouquets, complete with flowers of all the seasons, painted over an extended period of time? In this contemporary version, students will study and paint a different flower each week. A single painting will develop from these studies, with a different piece being added to the painting each session.

Previous experience with watercolors is desirable, and students should bring whatever materials they have on hand to the first session.

Instructor: Rob Proctor is a Boettcher scholar who studied at the University of Colorado. He has held one-man shows in three countries and his botanical drawings and watercolors hang in many collections throughout the world.

Fee: \$48 members/\$53 non-members

Limit: 15



10 Watercolor Workshop

Section I: Saturday, June 3

Section II: Wednesday, June 28
9:30 a.m. to 3:30 p.m. Classroom B

Spend a day in the Gardens capturing the glory of June's flowers in watercolor. The course includes exercises in perception and instruction in the stages of developing a painting. An elementary understanding of watercolor is preferred.

Bring watercolor supplies, drawing paper and charcoal, something to sit on and a lunch.

Instructor: Lynette Swanson-O'Kane

Fee: \$22 members/\$24.25 non-members

Limit: 12

Watercolor Painting

(five sessions)

Wednesdays, July 12, 19, 26,
August 2, 9

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Morrison Center at Denver
Botanic Gardens

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: 1½-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane

Fee: \$60 members/\$66 non-members

Limit: 12

Arranging Lessons with Fresh Flowers

Mondays, July 17, 24, 31,
August 7

9 a.m. to noon Classroom B

Summer is the perfect time to learn

"Just for Kids"

Children can discover some of the many wonders of the plant kingdom in the Gardens' "Just for Kids" program. The classes are designed for children of ages 3 to 11; they will meet at Denver Botanic Gardens. The program is an innovative series of interdisciplinary courses offering separate classes for preschoolers, ages 3 to 4, children of ages 5 to 7 and youngsters of ages 8 to 11.

Subjects include the steamy, noisy world of the tropical rainforest, the appetites of dinosaurs, a summer star festival in the Japanese Garden, tasty tropical treats such as chocolate and vanilla, and wonderful wildflowers.

All courses are four sessions long and meet Mondays through Thursdays. Professional teachers are enthusiastically committed to provide a hands-on learning experience that is fun.

Preschoolers will meet from 9:30 to 11:00 a.m. and their classes are limited to 8 children, with the fees being \$25 for DBG members and \$27.50 for non-members. Children of ages 5 to 7 meet 9:30 to 11:30 a.m. and young-

sters 8 to 11 meet 1:30 to 3:30 p.m. The class fees for these two groups are \$30 for DBG members and \$33 for non-members.

how to make floral arrangements to complement a favorite spot in your home. Students will learn how to select and cut fresh flowers for arrangements that will be prepared in class.

Please bring two containers (no glass or silver), clippers, scissors or knife, a large bucket with a handle for gathering flowers and two needle-point flower holders (available in the DBG Gift Shop). All other materials, including flowers, will be provided.

Instructor: Avalonne Kosanke is a master flower judge for the National Council of State Garden Clubs and has over 25 years of teaching experience.

Fee: \$53 members/\$58 non-members (includes a \$5 materials fee)

Limit: 15

For Preschoolers, ages 3-4
Small Fry Safari,
July 17 to 20
Seeds and Shoots,
July 31 to August 3

For Children 5-7 and 8-11

Brontosaurus Brunch,
June 26 to 29
The Festival of Stars,
July 10 to 13
Under the Canopy,
July 17 to 20
Birds, Bats and Beetles,
July 24 to 27
Wild and Wooly,
July 31 to August 3
Land of the Lotus
August 7 to 10

Dry It. You'll Like It.

Tuesdays, July 25, August 1
9:30 to 11:30 a.m. Classroom B

Dahlias, zinnias, roses and black-eyed Susans are among the flowers whose beauty you will learn to preserve in silica gel in this class. Students will select and dry garden and roadside flowers for use in winter arrangements.

Please bring two plastic shoe boxes with lids, a small plastic bucket with a handle, scissors, clippers, wire cutters, a small, soft artist's brush and an empty three-pound coffee can with lid. All other materials, including flowers, will be provided.

Instructor: Avalonne Kosanke

Fee: \$26 members/\$28 non-members (includes a \$10 materials fee)

Limit: 20

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No



The Gardens is the summer place to be.

Lecture Series Reminder

A limited number of tickets still remain for the final three lectures of the Bonfils-Stanton Lecture Series.

On Tuesday, September 12, Frederick McGourty will discuss "Perennial Combinations." Time remains in the fall for planting perennials and this lecture will be full of inspiration.

Mary Tonetti Dorra will be the Gardens' guest speaker on Tuesday, October 10. She will present "Monet's Giverny: A Painter's Garden." On Tuesday, November 14, the 1989 series concludes with James van Sweden and "The New American Style of Garden Design."

Tickets are \$3 each for members and \$6 each for non-members. They can be obtained by completing the registration form for classes and field trips in this newsletter and mailing a check along with a stamped, self-addressed envelope to the Gardens. For further information call 331-4000, extension 20.

Waterlily and Aquatic Plant Auction

The Colorado Water Garden Society will hold its auction of tropical waterlilies and bog plants in Classroom B and its adjoining patio, on the east side of the education building at 1005 York Street, on Sunday, June 11. The auction will begin at 2 p.m., although plants may be viewed beforehand.

Both night- and day-blooming waterlilies will be offered. The night bloomers are highly recommended for those of us who work during the day. For more information about the auction call Rose Swenby at 444-4525, or John Mirgon at 922-9559.

Gardening Volunteers Needed

The outside gardening staff needs enthusiastic volunteers to assist with the maintenance of plants throughout the Gardens. If you enjoy working with annuals, perennials and roses and would like to work from 8:30 to 11:30 a.m., join them on Tuesdays and Wednesdays in June. Parking is a problem in our area so please park in the public lot across from the York Street gate or along 11th Avenue north of the Gardens. Please wear appropriate gardening clothes and bring gloves, hand pruners and a trowel for your use.

Weather permitting, you will be fertilizing annuals, perennials and roses; cultivating and deadheading annuals, perennials and roses; and generally cleaning up and weeding. The following Thursday of each week is scheduled as a raindate. Contact Joann Narverud at 331-4000 or Anne Bobal at 751-9078 for more information. Meet in the blue and tan service building west of the service entrance at 11th Avenue and Gaylord Street.

The Rock Alpine Garden needs help planting, weeding, trimming and seed collecting. If you have an interest in high mountain wildflowers, this is the place. They meet in the Rock Alpine Garden on Wednesdays.

Watercolor "Paint-Out" and Show

The Colorado Watercolor Society will present its annual water media exhibition at the Gardens over the Fourth of July weekend.

Exhibition chairman Wilma Stapleton has announced that large, framed

paintings will be hung for the show and that hundreds, matted and of various sizes, will be offered for table viewing. The artworks will be juried by the Alpha Gallery.

Mrs. Stapleton also announced that the society will hold a "Paint-Out" at the Gardens on June 7, using our plantings to inspire its 80 members for their paintings, prior to the show.

Hours of the exhibit are 9 a.m. to 7 p.m. Saturday, Sunday and Wednesday — July 1, 2 and 5. This offers evening visitors during the Gardens' extended summer hours an opportunity to enjoy the show. On Monday and Tuesday the show is open from 9 a.m. to 4:45 p.m. There is no charge to enter John C. Mitchell II Hall where the exhibit will be hung.

Iris Society Show and Sale

Sponsored by Region 20 of the American Iris Society, the 1989 Iris Show and Sale at the Gardens will be Saturday and Sunday, June 3 and 4.

It will be a colorful weekend at the Gardens. The exhibition of blossoms in John C. Mitchell II Hall will complement the hundreds of blooms that will be sparkling in the Gardens' iris display garden at the same time.

This is not only a good time to view these lovely flowers but to note which ones you *must* have in your own garden and to buy plants from the knowledgeable iris society members who will be in attendance at the show.

Hours of the exhibit are 1:00 to 4:45 p.m. Saturday and 10:00 a.m. to 4:45 p.m. Sunday. There is no charge for the show beyond the regular entrance fee for the Gardens. For more information call show chairman David Miller, 233-5561, or regional vice president Jess Quintana, 777-2452.

CALEND JUN

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
					1	2	3
	<i>*First meeting of a class with more than one session</i>						Iris Show & Sale, Mushroom ID*, Watercolor Workshop
	4	5	6	7	8	9	10
	Iris Show & Sale						
	11	12	13	14	15	16	17
	Japanese Tea Ceremony, Water Garden Society Sale			Escape to Your Gardens: "Japanese Festival"			Tea Ceremony, Bonsai Show, F.T. Rocky Mtn. Nat'l Park
	18	19	20	21	22	23	24
	Tea Ceremony, Bonsai Show		A Day of Discovery	Beginning Bonsai*, Plant Life Field Trip	Paragon Ragtime Orchestra	Paragon Ragtime	Terrace and Garden Tour
	25	26	27	28	29	30	
		Brontosaurus Brunch*	Young Audiences Concert	Watercolor Workshop, Photography & Botanical Illustration Field Trip			

Coming Next Month

July 1
Field Trip to Chatfield Arboretum
July 1-5
Watercolor Society Exhibit

July 5
Alpine Ecology
July 8
Watercolor & Pencil Techniques for Botanicals*, Iris Rhizome Sale

July 9
Japanese Tea Ceremony
July 10
Birds of Chatfield Arboretum, Perennial Pleasures

July 11
Young Audiences Concert
July 12
Watercolor Painting*, Escape to Your Gardens

July 13
Perennial Garden Walk I
July 15
Tundra Trip to Corona Pass
July 16
Members' Day at Chatfield Arboretum

July 17
Arranging Lessons with Fresh Flowers*
July 19
Herb Garden Walk I
July 19-22
Garden Writers Conference

July 25
Young Audiences Concert, Dry It. You'll Like It*
July 29
Tea Ceremony, F.T. to Mount Goliath, Daylily Exhibit

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE

June 1989



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"Glass at the Gardens" 10th Anniversary August 3-13

The Glass Artists Fellowship, sponsor of the annual "Glass at the Gardens" glass arts exhibition, has greatly expanded its 1989, 10th anniversary, program.

The show will run through two weekends, August 3 through 13, and the organization has for the first time scheduled lectures, tours and classes to supplement its show.

Using floral motifs (reflecting the botanical purpose of the site of the exhibition) professionals within the Glass Artists Fellowship will teach and demonstrate a wide range of glass-arts subjects. Events will be accessible to both untrained glass enthusiasts and to experienced hobbyists and teachers.

Members of the Gardens will want to participate in these special "Glass at the Gardens" classes and to alert their non-member friends of this expanded program. Since the educational activities have been organized by the fellowship *entirely as a benefit for Denver Botanic Gardens*, there is no reduced registration fee for DBG members, and the number of registrants for each event is limited.

Please use the special "Glass at the Gardens" registration form included on page 6 for these activities.

A Bit of DBG Downtown

The next time you're brown bagging downtown on the 16th Street Mall this summer, stop and eat your lunch in the May D&F Plaza. You'll see that it is now alive with colorful water lilies and other aquatic plants—courtesy of Denver Botanic Gardens.

The Gardens' participation in this bit of creative urban relandscaping is part of a cooperative effort to not only brighten and humanize the "concrete jungle" but to remind the thousands of shoppers on the mall that they've got another, more complete garden to visit, located just about a mile to the east.

The focal plant of this unusual display of ornamental aquatic plants is *Victoria* 'Longwood Hybrid,' the large-leaved water lily hybridized by Patrick Nutt of Longwood Gardens. The DBG staff predicts it will thrive in the reflected heat that bathes the plaza.

However, for resting shoppers and picnickers the entire plaza has been redone with trees and other ornamental plantings. When you visit it you can proudly reflect that it's a little bit of *your* Gardens, moved downtown.

Green Thumb

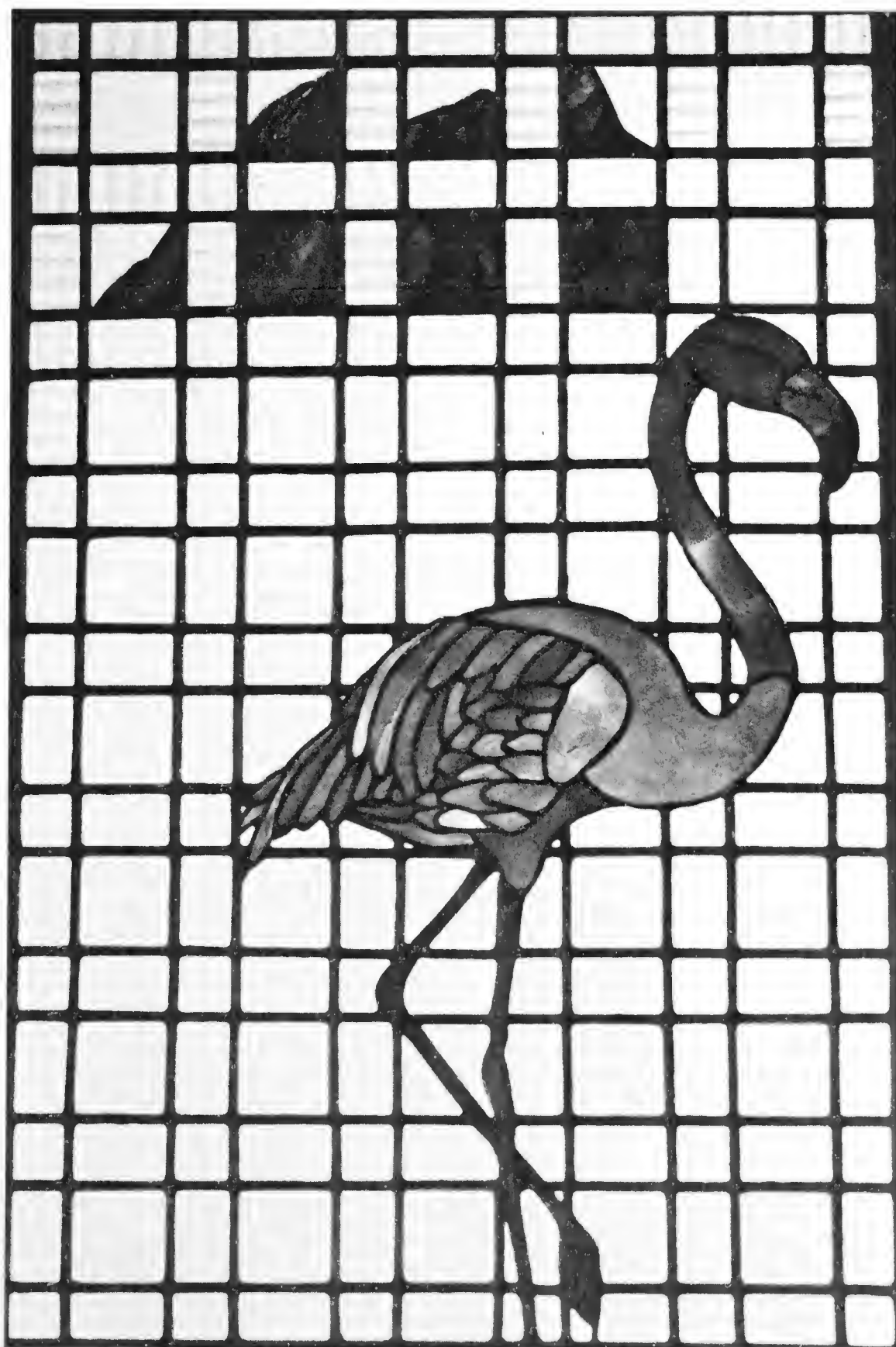


NEWS

Denver Botanic Gardens

July 1989

Number 89-7



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art, from a pre-
vious show*

Summer Outdoor Guide Training

Children and adults are led down the colorful paths of the Gardens throughout the summer by volunteer guides. Training for this guiding program begins Wednesday, July 12, in the cool of the day, at 9 a.m.

The training lasts eight weeks, ending August 30. Classes meet on Wednesdays in classroom C promptly at 9 a.m. The front gate will be open early enough to allow students to enter in time for the start of the class.

After a brief introduction each Wednesday, students will proceed outdoors with the instructor to observe and discuss specific collections. All areas will be covered, from the xeriscape and plains gardens to the rock alpine, Japanese, herb, perennial and rose gardens. These are just a few of the collections to be covered in the class.

The course will include an introduction to the Gardens (including history) and tour-leading techniques. As the end of the training approaches students will be encouraged to follow along on tours being led by current, experienced guides. All of this will help prepare you to lead tours; you will have opportunities to lead in September.

The outdoor tour guide season runs from May 1 to September 30. Groups will vary, from young schoolchildren to adults. Guides are scheduled for tours according to the days and hours of your preference as much as possible. Most tours are on weekdays; very few are in the evenings or on weekends.

Guides at Denver Botanic Gardens enjoy a lot of activities. They attend brown-bag seminars, go on field trips and have teas and potlucks. They are rewarded by knowing they are providing a continually growing service for the Gardens and the community, and that they are helping a child or adult enjoy nature from a new perspective.

The course cost is only \$25, which covers a notebook filled with historical and botanical information. Register using the education department registration form in this newsletter or call 331-4000, Ext. 20, for more information. Become a member of this dedicated corp of outdoor guides now!

Guide Carrie McLaughlin helps children enjoy Gardens.

Day of Discovery: Colorado Horticulture

The July Day of Discovery, Tuesday, the 18th, will explore the special and rewarding possibilities of practicing a horticulture that is specifically suitable to our part of Colorado.

Lectures at 10 a.m. and 12:30 p.m. by knowledgeable horticulturists will cover the use of native plants in your yard and the choice of plants for the microclimates that exist in nearly every landscape. At 11 a.m. guides will lead tours of the xeriscape and plains gardens at 1005 York Street.

Beyond the regular gate fee for non-members there is no charge for these activities. For information on the Day of Discovering Colorado Horticulture, call 331-4000, Ext. 24.



Tributes

In honor of Bruce Warneke
Civil Section, Western Design Team,
National Park Service

In memory of Donald F. Brown
Mr. & Mrs. George J.M. Kelly
Elizabeth Rendle Myer

In memory of Jeanette Cohen
Ms. E. Sydney Glick

In memory of Alex Creighton
Mr. & Mrs. John F. Falkenberg

In memory of Joseph Epstein
Solange Gignac & Alan Huggins
Norma & Randal Heinz
Mr. & Mrs. William Y. Holland
Mr. & Mrs. Robert Troxell

In memory of Charles Nicola
Mr. & Mrs. John F. Falkenberg
Mr. & Mrs. Benjamin Stapleton

In memory of Mabel M. Shepherd
Catherine Den

Old Adding Machines Wanted

If you have any old adding machines tucked away in your basement, garage or closet, please consider donating them to the Gardens for the annual Plant and Used Book Sale. They will be needed for next year's and all future sales. The newer machines cannot withstand the heat of the sun.

Garage sales are good places to locate the old, but sturdy machines. If you happen to be at a garage sale and see one, think of the Gardens.

You can bring any machines to the Denver Botanic Gardens House at 909 York Street or call 331-4000, extension 14, if you have any questions.

Green Thumb News Number 89-7 July 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than June 20 for August, July 20 for September and August 21 for October.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Accredited by the
American Association
of Museums

Down the Garden Paths in July

Two activities converge at Denver Botanic Gardens in July that suggest an opportunity to stroll through the Gardens with refreshed appreciation.

The Native Plant Workshop on the 16th, and the Day of Discovering a Colorado Horticulture on the 18th will call attention to those plants native to the plains and foothills of the eastern part of the state and to the deserts and mesas of the West. Then garden writers, from all parts of the United States, will arrive in Denver for their conference the following week.

Try this: Take a walk through those areas of the Gardens that speak most eloquently of our Colorado floral heritage, and look at the plants there through the eyes of a stranger, the eyes of an editor from New Jersey or a writer of books from Oregon, reporting the scene for your readers back home.

What do you see? How would you describe our Colorado plants?

In the Xeriscape Garden, an unfamiliar shrub stands out. Do you relate *Mahonia fremontii* to the Oregon grape hollies you've seen in the gardens of your home town, or do you note how its prickly gray-blue foliage intercepts the too-blue Colorado sky and softens it so that the sky meets the pale soil underneath harmoniously?

How do you appreciate the piñons growing in the Charles C. Gates Memorial Garden? Is *Pinus edulis* merely a runty relative of the towering white pines of the East, or can you relate how apt it is for a region of mesas, rolling shale hills and an annual precipitation of less than 20 inches?

Prunus besseyi, in the Laura Smith Porter Plains Garden— is it a “natural bonsai” nestled among strange, but beautiful, grasses? Are its dark fruits ornamental, ripening in the July sunshine, or do you appreciate the sustenance they offer to human and other animal inhabitants of its arroyo-carved home?

How do you, stranger from another part of the continent, describe the blue of little bluestem, the leaves of cliff rose, the aroma of three-leaved sumac? Let your July visit to the Gardens refresh your Colorado point of view.



Stroll down the garden paths in July.

Escape to Your Gardens

Enjoy the “Colorado Scene” at the Gardens on Wednesday, July 12, from 5 p.m. until dusk. It is the second in a series of special summer evenings of entertainment designed to help families “Escape to Your Gardens.”

The “Colorado Scene,” arranged in cooperation with KYGO radio, will feature music by the bluegrass group Southern Exposure. They will perform throughout the evening in the amphitheater.

Staff members of Robert Waxman Camera, Inc., will be on hand to share techniques and answer questions on flower photography. You will pick up tips that you'll enjoy using the entire summer.

These pleasant “Escape to the Gardens” evenings offer members an excellent opportunity to introduce Denver Botanic Gardens to their friends. There is no charge for the activities beyond the regular gate fees for non-members. So gather a group, pack a picnic supper and bring your friends and a camera to the Gardens on the evening of July 12.

MacTonight Comes to the Gardens

MacDonald's, Inc., through their Ronald MacDonald Activity Club, will host an evening of family activities at the Gardens on Wednesday, July 26, until 8 p.m.

A “green zoo” tour for children, a chance to meet MacTonight and a pleasant opportunity to bring a picnic supper are being offered. All children who successfully find all the plants with animal names (such as *ponytail palm*) that are included in the “green zoo” tour will receive a coupon redeemable at participating MacDonald's restaurants.

Members of the Gardens and Activity Club card holders will be admitted free. Non-members are welcome to join the festivities for the regular gate fee. For more information on the Ronald MacDonald Activity Club for children, contact Sheila at 440-7822.

Volunteer to help garden on Tuesdays or Wednesdays this summer.



Garden Writers Conference in July

Members who have not yet registered for the Garden Writers Association of America conference to be held in Denver July 19 to 22 are urged to reread the program details that were printed in the June *Green Thumb News*. You'll find them exciting.

Denver Botanic Gardens is hosting the event, and members are invited to participate. A registration form was also included in the June issue. For more information call the education department, 331-4000, Ext. 20.

Library Announces Evening Hours

During the summer evening hours, through Labor Day, the Helen Fowler Library will remain open Wednesdays. Extended evening hours will occur on Saturday, Sunday and Wednesday evenings until dusk. What better way to spend the evening than exploring your favorite gardens in the cool of the day and then checking out a book from the library?

YES! Sign me up as a new member!

Name(s) _____

Address _____

City _____ State _____

Zip _____ Phone _____

\$35 ☐ Family/Dual (two adults)

\$25 ☐ Individual

\$25 ☐ Senior Couple (both over 65)

\$18 ☐ Senior (over 65)

\$18 ☐ Student (full-time)

\$ _____ ☐ Other _____

☐ Cash ☐ Check ☐ VISA ☐ MC

Card # _____

Exp. Date _____

Signature _____

Kindly credit this new membership to the efforts of:

Name _____

Address _____

Phone _____

Please return this application & payment to
Denver Botanic Gardens
909 York Street
Denver, Colorado 80206
331-4000

Feel free to make extra copies of this application!

Member-Get-A-Member Contest

Share your happy experiences at the Gardens and encourage your friends to become Gardens members too!

You will receive a \$2 gift certificate for every new member you bring the Gardens. The certificate will be good in the Gift Shop for any of the lovely and useful items sold, or you may use it toward your membership renewal. In addition, there will be a contest for everyone who brings in at least five new members — with really special prizes!

Contest Prizes

The grand prize is either six hours of garden design for your home garden by Gayle Weinstein, director of plant collections at Denver Botanic Gardens, **or** (and this contains two options) six tickets to a 1990 ListenUp Garden Concert *and either* a \$50 gift certificate good in the Gift Shop *or* a flower arrangement done by an expert DBG arranger. The arrangement includes up to \$50 worth of dry or fresh materials using the winner's own container.

The second prizewinner receives four tickets to a 1990 ListenUp Garden Concert and a \$50 gift certificate good toward a botanical illustration from the Botanical Treasures Show and Sale at the Gardens November 3, 4 and 5, 1989.

The third prizewinner receives two tickets to a 1990 ListenUp Garden Concert and a \$35 gift certificate that

may be used toward classes or lectures offered through the Gardens' education department. These are good through 1990.

Contest Rules

Please note: A new member will be defined as someone who has not been a member in 1989.

1. All participants must be paid-up members of Denver Botanic Gardens at the time the new member's application is received.
2. The current member signing up the most new memberships (with a minimum of five memberships needed for eligibility), gets the grand prize.
3. Second and third prizes will be awarded to the next two highest winners who bring in a minimum of five memberships.
4. In case of ties, the winners will be determined by drawing.
5. Eligible membership payments must be postmarked by the 15th of September. **The soliciting member's name, address and phone number must accompany the new member application.** Please note: Checks or charges that are not accepted by the bank will not be eligible.
6. The \$2 gift certificates will be mailed by the end of October.
7. Winners will be determined by the membership committee.

Summer Concerts for Children

Two Young Audiences Concerts remain this summer. These evening concerts are fun for families with children of all ages. Concerts begin at 6:30 p.m., with open seating available 45 minutes before, allowing time to enjoy a picnic in the amphitheater.

The remaining programs are:
 Movement, Myths and Masks
 Tuesday, July 11
 (Raindate: Sunday, July 16)

Rock, Rocka, Rockadiles
 Tuesday, July 25
 (Raindate: Sunday, July 30)

If tickets remain, they will be sold at the Gardens one week prior to each concert date at the Denver Botanic Gardens House, 909 York Street, between 8 a.m. and 5 p.m. They may also be available at the other outlets the month of July. These outlets are listed in the June newsletter.

Tickets are \$4 each, with children under age 2 free. Call 825-3650 to purchase tickets with VISA, MasterCard or Choice. A dollar service charge will be added to each phone order.

ListenUp Garden Concerts in July

This summer of musical fun continues through July and into August with the following concerts sponsored by KCFR-FM, Denver Botanic Gardens and ListenUp Audio/Video.

Hot Rize, Red Knuckles and the Tony Rice Unit

Thursday, July 6, or Friday, July 7, at 7:30 p.m. (Raindate: Saturday, July 8, at 10 a.m.) Tickets are \$8 each (DBG/KCFR member price is \$6 each) and go on sale at outlets starting June 26.

The National Repertory Orchestra

Thursday, July 20, at 7:30 p.m.



(Raindate: Friday, July 21, at 7:30 p.m.) Tickets are \$7 each (DBG/KCFR member price is \$5 each) and go on sale at outlets starting July 10.

Music from the Santa Fe Chamber Music Festival

Thursday, August 3, at 7:30 p.m. (Raindate: Friday, August 4, at 7:30 p.m.) Tickets are \$8 each (DBG/KCFR member price is \$6 each) and go on sale at outlets starting July 24.

Remaining concerts of the series are The Dirty Dozen Brass Band and Judy Collins with JoAnn Falletta and The Denver Chamber Orchestra. Ticket sales at the outlets will take place in August.

Remember to listen to KCFR-FM, 90.1, beginning at 4 p.m., if bad weather threatens. For additional ListenUp Garden Concert information call 744-9999.

Watercolor Show Reminder

A reminder: An exciting juried exhibition of watercolors will be presented in John C. Mitchell II Hall Saturday through Tuesday over the long Fourth of July weekend.

Hours of the show, sponsored by the Colorado Watercolor Society, are 9 a.m. to 5 p.m. daily except Saturday and Sunday when they will be extended until 7:30 to give our "summer evening hours" visitors a chance to view the art work.

Iris Rhizome Sale

You didn't make it to the sale during the June iris show? Well, you haven't missed out completely. Regional members of the American Iris Society will be selling rhizomes of the best varieties on Saturday, July 8, just inside the main entrance at the Gardens.

These divisions will be freshly dug from the gardens of the society's members, some of whom are nationally prominent hybridizers, and from the display collection at Denver Botanic Gardens. It's your annual opportunity to add the finest and latest varieties to your own collection, and now is the ideal time to plant iris.

The sale begins at 10 a.m. and continues until the plants are sold out. For more information call Jess Quintana, regional vice president, 777-2452.

Daylily Sale on July 29 and 30

The Gardens will host the annual daylily sale by Region Nine of the American Hemerocallis Society, Saturday and Sunday, July 29 and 30. This year the event will be held outdoors in the sunken garden, just inside the York Street gate, and will be accompanied by an exhibit of daylily photographs.

According to the society, these plants are among the most versatile of modern perennials. "Daylilies can fit almost anywhere in the landscape. They can nestle into a rock garden or stand out against a tall fence. Their bloom season can be a few weeks or all summer."

If you have in your landscape scheme any of the almost limitless uses for daylilies, you'll want to visit the Gardens the last weekend in July for this sale. The hemerocallis display in the center of the Gardens will be in full bloom to further tempt you.

Hours of the sale are noon to 4 p.m. each day. For more information call Harry Kuesel, 795-9718.

Carl Topilow leads The National Repertory Orchestra on July 20.

Hemerocallis 'Medea'



Contemporary Art Glass in America

Thursday, August 3
11 a.m. - 12 noon
Location: Classroom C
Limit: 75
\$4.00

This slide show and lecture will feature exemplary works of glass art in Colorado and the nation, with behind-the-scenes glimpses of glassmaking and working. Instructors are Ann Wolff and Sue Wheeler.

Contemporary Stained Glass in Denver: A Caravan Tour

Thursday, August 3
1 - 3 p.m.
Tour meets in DBG Lobby
Limit: 20
\$7.50

This is a caravan tour of central Denver (using your own or a shared vehicle) to visit public examples of fine contemporary art glass. Leader is Bette Cookson.

Contemporary Art Glass: Lecture and Tour

Thursday, August 3
11 a.m. - 3 p.m.
Limit: 20
\$10.00

This includes the two preceding events.

Painting on Glass

Friday, August 4
11 a.m. - 12 noon
Location: Classroom B
Limit: 25
\$6.00

This demonstration will teach techniques, materials and equipment for painting on glass to be fired. Teacher is Gary Vigen.

Fusing Dichroic Glass: Hands-On the Future

Saturday, August 5
9:30 - 11 a.m.
Classroom B
Limit: 12
\$19.50

Preceded by a demonstration on fusing glass, this hands-on experience in making a small, elegant jewelry piece will feature space-age dichroic glass fused with compatible materials. While your work is in the kiln, a lecture will illuminate the background of dichroic glass and the process being used. Instructor is Gil Reynolds.

Kaleidoscope Workshop

Tuesday, August 8
10 a.m. - 12 noon
Classroom B
Limit: 24
\$18.00

Your end result from this hands-on class will be a working kaleidoscope (\$23.95 retail value) of glass chips and jewels. Students should bring one very small "found" object to make their creation unique. For adults and children 10 and over, the class is taught by Connie Sanchez.

Stained Glass for Interior Design Concepts

Wednesday, August 9
7 - 8:30 p.m.
Location: Classroom C
Limit: 75
\$6.00

For the home decorator, assuring quality within an aesthetic framework is often daunting. This slide assisted lecture will enable you to evaluate and choose glass art for your home. Lecturer is Suzanne Cooper.

The Epiphany of Tiffany in America

Thursday, August 10
11 a.m. - 12 noon
Location: Classroom C
Limit: 75
\$6.00

This slide-assisted talk on American stained glass will focus on Tiffany works and their place in the history and direction of glass art. Speaker is Carol Fryer.

The Epiphany of Tiffany in Denver: A Caravan Tour

Thursday, August 10
1 - 3:30 p.m.
Tour meets in DBG Lobby
Limit: 20
\$7.50

This is a caravan tour of central Denver (using your own or a shared vehicle) to visit public examples of Tiffany and other older fine stained glass. Guide is Bette Cookson.

The Epiphany of Tiffany: Lecture and Tour

Thursday, August 10
11 a.m. - 3:30 p.m.
Limit: 20
\$10.00

This includes the two preceding events.

Stained Glass: New Techniques for Recreation Teachers

Thursday, August 10
3 - 5 p.m.
Location: Classroom C
Limit: 75
\$6.00

A complete course in new techniques and tools for safely cutting flat glass, this class will help recreation leaders, art therapists and public school teachers enhance their craft curricula with glass work. The instructor is Don Abel.

Painting on Glass, Hands-On

Friday, August 11
1 - 3 p.m.
Location: Classroom B
Limit: 12
\$20.00

A thorough experience in using techniques, tools and materials will prepare you to paint on glass, ceramic and porcelain before firing. The teacher is Gary Vigen.

Sun Catcher, Flower Catcher

Saturday, August 12
11 a.m. - 12 noon
Location: Classroom B
Limit: 30
\$18.00

Students will make a sun catcher, framed in copper foil (\$18.95 retail value) to hang in the window, using beveled glass and pressed, dried flowers. The class is designed for adults and children 14 and over. There will be one instructor with two aides to ensure plenty of guidance for novices.

"Glass at the Gardens" Class Registration Form

The enclosed check, in the amount of _____, is to cover the registration for the following glass-art classes:

Name of class(es) _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Confirmations will not be sent. Mail registrations to:

"Glass at the Gardens"
Denver Botanic Gardens
909 York Street
Denver, CO 80206

Chatfield Highlights

The wetlands area at Chatfield Arboretum has been one of the primary destinations of the 3,335 people who visited the arboretum last year. Since it was constructed in August and September of 1986, the wetlands acreage has increased from 7.15 acres to 10.1 acres. Modifications have been devised to retain surface water in the four ponds that comprise the area.

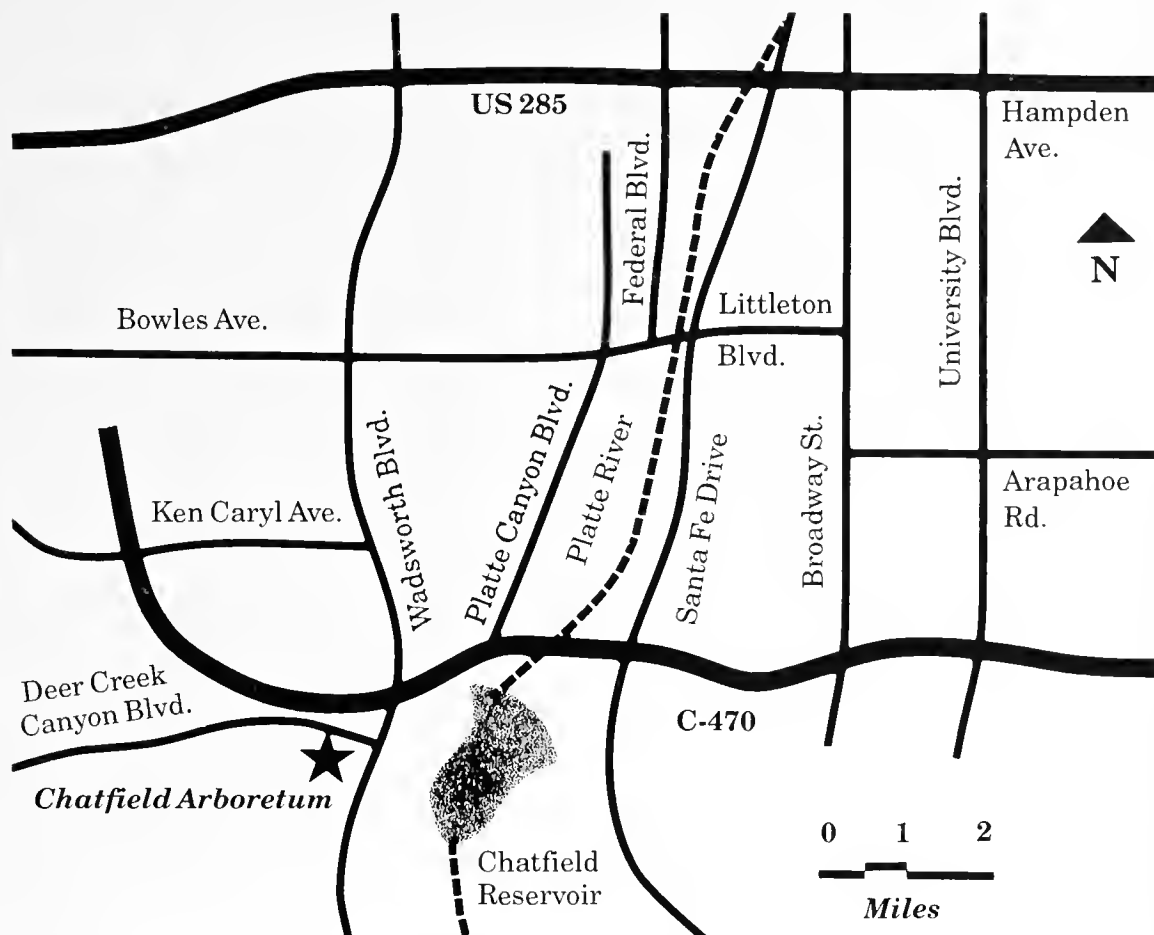
A new branch of the Moras L. Shubert Trail has been added to reduce possibilities of disturbing both the nesting and feeding of the many birds in the immediate vicinity. This trail leads to a shaded observation point, where snow fencing offers protected viewing. In the near future another footbridge will be constructed to provide an additional link to the Roberts Riparian Trail on the north bank of Deer Creek.

The bird count has dramatically increased since the wetlands were introduced. Twenty-one new bird species have been observed; they have been attracted to the new ponds. Three varieties of teal, a pair of pied-billed grebes, an American coot and a spotted sandpiper have discovered the wetlands as nesting sites.

The overabundant Canadian geese, which previously scratched for grain kernels in the fields of the Green farm, have also increased in number, with several pairs nesting on the two islands and in the surrounding tall rushes. A family of black-crowned night herons moved to the wetlands in mid-summer of 1988 and took up residence for several weeks. They have already been observed there again this spring by the Tuesday Birders, the official census takers at the arboretum.

An interesting consequence of the wetlands creation has been the large influx of yellow-headed blackbirds in the cattail and bulrush environment. In prior years their first cousin, the red-winged blackbird, had been only one of three species to successfully nest at Chatfield Arboretum. With the arrival of the yellow-headed blackbirds the redwings have moved closer to Deer Creek, disrupting some of the smaller, less aggressive songbirds in the riparian habitat.

Being able to observe great blue herons and kingfishers diving for food or the double-breasted cormorants flying overhead has added new pleasures to the tranquility of the arboretum.



Native Plant Society Workshop July 16

The Colorado Native Plant Society has organized a workshop on the native plants of Colorado, to be held at the Gardens on Sunday, July 16, from 10 a.m. until 4 p.m. The extensive program, ranging from landscaping to conservation, has been developed to enlighten both beginning plant identifiers and seasoned botanists.

Members of the society will lead tours from 10 a.m. until noon and from noon until 2 p.m. through the major areas at the Gardens where native plants are in use or on display.

From 10 a.m. until noon experts will present guidance on plant identification, using handbooks written specifically about the native flora of Colorado. These books are on sale in the Gardens Gift Shop. The taxonomy workshops will be in classrooms B and C and space is limited.

From 1 to 4 p.m. a series of lectures and slide programs in John C. Mitchell II Hall will cover "An Overview of the Plants of Colorado," "Microhabitat of the High Plains," "Rare and Endangered Plants in Colorado," "Native Plants to Attract Wildlife to Your Garden" and "Using Natives in Designed Landscapes."

Throughout the day experts from the society will provide educational display and demonstration tables on wildflowers and ecology.

There is no preregistration or fee for any of the classes or lectures. The Gardens' regular gate fee will be in effect for non-members of the Gardens.

For more information about this ambitious day of activities celebrating Colorado's rich floral heritage call 331-4000, Ext. 24.

Members' Day at Chatfield Arboretum

On Sunday, July 16, a limited number of DBG members will have the opportunity to participate in the Members' Day at Chatfield Arboretum. Since this is an introduction to the arboretum for members of DBG, and since many of you have never been to the arboretum prior to this, we are offering this map for your use. Be sure to save the confirmation card sent to you and enjoy your visit.

Salsify, by Emma Ervin





Xeric Plants at Denver Botanic Gardens— A Seminar for Colorado Nurserymen

(one session)

Section I: Thursday, August 17
Section II: Thursday, August 24
8 a.m. to noon Classroom C

(Please indicate your section on the registration form.)

Nursery people are "on the front line" in educating the public—their customers—about drought-tolerant plants and water conservation in the landscape. This is an opportunity to increase your knowledge of xeric plant characteristics and horticulture, using the collections at Denver Botanic Gardens.

Look at selected plants, discuss their origin and growth characteristics, horticultural and maintenance needs, landscape uses, availability, and care in the nursery.

Please note that this is a course for professionals in the nursery industry, such as nursery owners, sales people and growers.

Instructor: Gayle Weinstein is director of plant collections at Denver Botanic Gardens.

Fee: \$16 members/\$18 non-members

Tree Walk at Fairmount Cemetery, Denver

Sunday, July 23
1:30 to 3:30 p.m.

During the summers of 1890 and 1891, over 4,000 trees (including seven species of oaks, sycamores, silver maples, Kentucky coffee trees and pines) were planted at Fairmount Cemetery. This is an opportunity to observe these as well as some more unusual trees such as scarlet oak and yellow buckeye.

A summer afternoon walk through these mature, historic specimens will sharpen your identification skills. The trees will be fully leafed out on this trip.

Instructor: Dr. William G. Gambill, Jr., Director Emeritus and a taxonomist at DBG, is a former botany and biology professor.

Meet: promptly at 1:30 p.m. just inside the entrance of Fairmount Cemetery, which is located at East Alameda and Quebec Streets in Denver.

Fee: \$7.50 members/\$8.25 non-members (includes \$3 for Trail of Trees, a 64-page illustrated guide to Fairmount Cemetery)

Limit: 20



Ornamental Trees for Colorado

(four sessions) Classroom C

Tuesdays, August 22, 29 and September 5, from 7:15 to 9:15 p.m. and field trip on Sunday, September 10, from 9 a.m. to noon

Just in time for fall planning and planting, this course will emphasize fall color. Identify and examine the landscape value of over 50 species of ornamental trees that are hardy in the Denver area. Students will observe slides of the plant material while the instructor discusses their cultural requirements and provides planting hints.

Instructor: Jeffrey Frank studied landscape architecture at Pennsylvania State University and the University of Virginia and is presently employed as a landscape architect.

Fee: \$36 members/\$40 non-members

Night-Blooming Nymphaeas

Sunday, August 27
7:30 - 9:00 p.m.

Come see the mysterious and colorful night-blooming tropical water lilies. This year three giant Victorias will be displayed. With a little luck they will open on cue at sunset and fill the air with their sweet fragrance. It promises to be an exciting and memorable occasion.

Cultural information will be provided in the cool of the evening and time will be allowed for questions and photography.

Meet: at the main pool promptly at 7:30 p.m.

Instructor: Joe Tomocik is a gardener-florist II at DBG and is responsible for

maintaining the DBG water gardens.

Fee: \$6 members/\$7 non-members

Limit: 20

Columbine Field Trip

Wednesday, July 12
9 a.m. to 4 p.m.

Our state flower should be blooming in profusion on this traditional field trip site near Bailey.

Located at the edge of the montane zone, habitats will include an interesting damp gulch and a ponderosa pine forest. If the group is lucky, wood lilies will be found.

Meet: at 9 a.m. in the main DBG parking lot to carpool and receive directions. Participants will share gasoline expenses.

Leader: Peter Root is an amateur botanist who volunteers regularly at the Kathryn Kalmbach Herbarium at DBG. He is also a volunteer naturalist at Roxborough State Park.

Fee: \$2.50 per person

Limit: 20

Tallgrass Prairie Field Trip

Saturday, August 12
10 a.m. to 2 p.m.

Observe a good example of tallgrass prairie along Highway 93 between Golden and Boulder. The dominant species is big bluestem but many other grasses such as switch grass, needle-and-thread, little bluestem, and side oats grama will all be seen at their peak. Fall flora including several asters, blazing stars and golden-rods will also be seen.

Please bring a plant identification

book and a hand lens if you have them, and don't forget your lunch.

Meet: promptly at 10 a.m. 3.3 miles north of Highway 58 (Golden) on Highway 93, at the dairy just north of 58th Avenue, on the east side of the highway.

Instructor: Paul Kilburn, Ph.D., has taught botany and ecology in Illinois and Colorado for many years.

Fee: \$5 members/\$5.50 non-members

Limit: 20



Japanese Tea Ceremony

Section VIII: Sunday, July 9
Section IX: Saturday, July 29
Section X: Sunday, August 6
Section XI: Saturday, August 19
 (one session) 2 to 3 p.m.
 Tea House in DBG's Japanese Garden

(Please indicate your section on the registration form.)

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

Fee: \$4.50 members/\$5 non-members

Limit: 15

Natural Style Flower Arranging

(four sessions)

Wednesdays, August 9, 16, 23, 30
7 to 9 p.m. Classroom B

Those who are busy during the day will find this course a lovely way to relax and study basic flower arranging in a natural, open style. Participants will have the opportunity to learn how to choose and cut floral materials as they select materials from our Cutting Garden to make arrangements during class.

Create floral arrangements that reflect the gorgeous late summer bounty of our gardens. Students are encouraged to bring whatever personal materials they may have to add even more interest and variety to their work.

Please bring your own containers and flower snips as well as a container (a small bucket is perfect) for holding water and flowers when cutting materials. A piece of floral foam or a needle-point flower holder and wire cutters or pruning shears will also be useful.

Instructor: An experienced floral designer and teacher, Julia Dobbins has studied floral arranging extensively both in the United States and England.

Fee: \$32 members/\$35 non-members

Limit: 12

Summer Lesson in Ikebana

Saturday, August 12
9:30 to 11:30 a.m.
Morrison Center at DBG

This summer workshop is an introduction to ikebana, but can also serve as a refresher course for students who have completed the "Beginning Ikebana Lessons" class.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water) and notebook.

Although flowers will be provided, students should bring their own line material (branches) cut from their yards.

Instructor: Joan Wooldridge is past president of Ikebana International and has teaching certificates in two schools.

Fee: \$10 members/\$11 non-members

Limit: 12

Summer Cooking with Herbs

(three sessions)

Tuesdays, August 15, 22, 29
6 to 8:30 p.m.
Morrison Center at DBG

Learn to use fresh herbs to add zest and variety to your cooking in this hands-on course. Students will undertake various techniques of herb cookery as they prepare appetizers, soups, salads and main dishes to be savored in the cool of the garden at the conclusion of each evening. The recipes chosen will be easily prepared and will emphasize the abundant fresh produce of late summer.

Sample grilled chicken breasts with coriander, cucumber and tomato relish; pasta and fresh pesto; cold sorrel soup; rose geranium ice cream; and a host of seasonal salads.

Please bring an apron, a sharp knife and a place setting to each class.

Instructor: An avid herb gardener and an enthusiastic cook, Pat Pachuta is also education director at DBG.

Fee: \$48 members/\$53 non-members (includes \$18 for three dinners)

Limit: 12

Carve-A-Summer-Centerpiece Workshop

Saturday, August 26
10 a.m. to noon
Morrison Center at DBG

Be the first to learn how to design creative centerpieces from your harvest of late-summer vegetables and fruits. Carve an elegant or fun centerpiece that can be lit with candles for evening parties. They can also serve as containers for flowers and will certainly be a conversation piece.

Begin with a watermelon and soon you'll be carving giant zucchinis, eggplants and cantaloupes at home. Nothing will escape your knife! Using a special carving kit you can become wildly creative and turn an ordinary vegetable into a masterpiece.

Please bring one or two small watermelons to class.

Instructor: Tina Goldstein is a fiber artist who studied at the University of Northern Colorado. She is a champion pumpkin carver and an enthusiastic teacher who has taught pumpkin carving classes at the Gardens.

Fee: \$10 members/\$11 non-members (Fee includes one carving kit.)

Limit: 20

Facing page:
Xeric gardening
examples at the
Gardens

This page:
Columbine, by
Emma Ervin

Previously Announced Classes

In the June *Green Thumb News* the following classes were offered. At press time for this issue these classes still had openings. Call the education department, 331-4000, Ext. 20, for information or refer to last month's newsletter for details. Each class has a size limit and advance registration is required.

Field Trips

Field Trip to Chatfield Arboretum
Saturday, July 1, 9 a.m. to noon

Alpine Ecology

Wednesday, July 5, 7 to 9 p.m.,
(Classroom A) and Saturday, July
8, 7 a.m. to 5 p.m. (Field Trip)

Field Trip to Golden Gate Canyon State Park

Saturday, July 8, 10 a.m. to 3 p.m.

Birds of Chatfield Arboretum

Monday, July 10, 8 to 11 a.m.

Tundra Trip to Corona Pass

Saturday, July 15, 8 a.m. to 4 p.m.

Field Trip to Mount Goliath

Saturday, July 29, 8 a.m. to 3 p.m.

Horticulture

Perennial Pleasures

Mondays, July 10, 17, 24, 31, and
August 7, 6:30 to 9:00 p.m.,
Classroom C

Garden Walks

Perennial Garden Walk

Section I: Thursday, July 13,
6 to 8 p.m. or
Section II: Thursday, July 27,
6 to 8 p.m.

Herb Garden Walk

Section I: Wednesday, July 19,
7 to 8 p.m.
Section II: Monday, July 24,
9:30 to 10:30 a.m.

Scripture Garden Walk

Section I: Thursday, August 10,
10 to 11 a.m.
Section II: Tuesday, August 22,
7 to 8 p.m.



Escape to the mountains on one of the Gardens' many field trips

Plants and Art

Watercolor and Pencil Techniques for Botanicals

Saturdays, July 8, 15, 22 (skip
July 29), August 5 and 12
1 to 3:30 p.m. in the Morrison
Center at DBG

Watercolor Painting

Wednesdays, July 12, 19, 26,
August 2 and 9
Section I: 9:30 a.m. to 12:30 p.m.
Section II: 6:30 to 9:30 p.m.
in the Morrison Center at DBG

Arranging Lessons with Fresh Flowers

Mondays, July 17, 24, 31 and
August 7, 9 a.m. to noon,
Classroom B

Dry It, You'll Like It.

Tuesdays, July 25 and August 1,
9:30 to 11:30 a.m., Classroom B

Plants and Design

Design for the Urban Garden

Section I: Friday, July 28, and
Saturday, July 29,
9:30 a.m. to noon
Section II: Friday, July 28, and
Saturday, July 29,
1 to 3:30 p.m.

Just for Kids

The Festival of Stars

July 10-13
Section I: 9:30 to 11:30 a.m.
For 5- to 7-year-olds

Under the Canopy

July 17-20
Section I: 9:30 to 11:30 a.m.
For 5- 7-year-olds

Birds, Bats and Beetles

July 24-27
Section II: 1:30 to 3:30 p.m.
For 8- to 11-year-olds

Wild and Woolly

July 31-August 3
Section I: 9:30 to 11:30 a.m.
For 5- 7-year-olds
Section II: 1:30 to 3:30 p.m.
For 8- to 11-year-olds

Land of the Lotus

August 7-10
Section I: 9:30 to 11:30 a.m.
For 5- to 7-year-olds
Section II: 1:30 to 3:30 p.m.
For 8- to 11-year-olds

Just for Kids classes have class
limits of 12 students.

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Two recurring garden headaches become acute in July.

This spring you rid your yard of its first crop of weeds, only to see them being replaced by others—either by more of the same kinds or by species that don't get around to germinating until they're nurtured by summer's heat. And, now that May's frequent rains are but a memory, you find yourself irrigating your yard with a frequency that unsettles your sense of conservation.

Fortunately, one cure can be prescribed for both pains: a summer mulch.

Although mulching is not an exact science (due to the complex nature of soils and their components, including organisms, and the seemingly uncontrollable variables in a garden setting) two long-held "truths" seem to remain true. Suitable mulches control both weed emergence and water loss from the soil.

Since most of the soils in our area contain far less organic matter than we're led to believe should exist in the composition of an ideal garden soil, we can also safely assume that—aesthetics aside and a choice being available—an organic mulch is probably preferable to an inorganic one in your yard. Actions by "bugs" and microbes eventually break these mulches down. The decomposed mulching materials help increase the organic content of at least the upper portion of the earth and, we assume, improve it as a medium for root growth and for nutrient and water transfer to the plants.

So what can you use to prevent regrowth of weeds and to help you

water less often? There are several low-to-no-cost products available.

One excellent mulch for flower and shrub beds is what's called "chips and chips" by the parks and recreation folks: that is, wood chips and horse chips. This is bedding material cleaned from horse stables and is relatively clean, free of weed seeds and composed of fresh wood chips to which have been added, naturally, horse urine and manure. Since most stable owners are meticulous about the health of their animals, this material is replaced frequently. Therefore, it does not have quite the barnyard character you'd imagine.

Spread two- to three-inches deep among either annuals or perennials, chips and chips is very effective in controlling weeds. The nitrogen-bearing horse products soon leach into the soil, leaving a bright, clean surface to frame your plants.

Another wood chip mulching material is the stump grindings obtained during tree removal. It is slightly denser than the preceding mulch because of the inclusion of soil picked up in the grinding process. This means that it is capable of supporting weed growth itself, but in actual use as a mulch the soil particles tend to wash down through the chips, leaving a relatively soilless surface.

Darker brown and of a coarser texture than the stable cleanings, stump grindings have a less formal, woodsy appearance. Perhaps in your landscape they are more suitable for flower beds on the side of the house rather than the border that lines your front walk. However, in most yards this mulch is more than acceptable.

Screened compost, of course, serves well as a mulch. Even if you are a dedicated compost maker, though, it is usually in short supply. Unscreened, its inconsistency and coarseness make it of marginal suitability for floral displays.

Pine needles, raked from underneath either ponderosa or white pines, are an attractive material for mulching flowers. Their normally drab color heightens to russet when wet with rain and is particularly pretty when they are used as an underlayment for white, blue or purple flowers. They decompose slowly, lasting in Denver for several seasons.

Garden centers carry many packaged commercial forms of organic mulches, from ground pine cones (beautiful, but expensive and hard to find) to various sizes of tree bark chips. Each can be recommended for its individual qualities.

However, be warned that peat moss and some peat-based mixes often act as barriers to water entering the soil and, though they are effective as mulches, often defeat their own reason for being by increasing the difficulty of watering. Also, the finer the texture of the mulch you use, the deeper you need to spread it to prevent the growth of weeds through it.

The obvious benefits of applying a summer mulch are so great that, notwithstanding all we still don't understand about them, nearly any mulch is better than none. However, the inexpensive ones described here will help cure your major summertime headaches, weeds and water wasting.

Larry Latta
Botanist-Horticulturist
Denver Botanic Gardens



C JULY

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

A	L	E	N	D	A	R
S	M	T	W	T	F	S
						1
						Field Trip to Chatfield Arboretum, Watercolor Exhibit
2	3	4	5	6	7	8
Watercolor Exhibit	Watercolor Exhibit	Gardens Open, Watercolor Exhibit	Watercolor Exhibit, Alpine Ecology*	Hot Rize, Red Knuckles and The Tony Rice Unit	Hot Rize, Red Knuckles and The Tony Rice Unit	Watercolor & Pencil Techniques for Botanicals*; Iris Rhizome Sale
9	10	11	12	13	14	15
Japanese Tea Ceremony	Birds of Chatfield Arboretum, Perennial Pleasures*	Young Audiences Concert	Watercolor Painting*, Escape to Your Gardens, Columbine Field Trip	Perennial Garden Walk I		Tundra Trip to Corona Pass
16	17	18	19	20	21	22
Members' Day at Chatfield Arboretum, Native Plant Workshop	Arranging Lessons with Fresh Flowers*	Day of Discovery: Colorado Horticulture	Herb Garden Walk I, Garden Writers Conference at Warwick Hotel	The National Repertory Orchestra, Garden Writers Conference at Warwick Hotel	Garden Writers Conference at Warwick Hotel	Garden Writers Conference at Warwick Hotel
23	24	25	26	27	28	29
Tree Walk at Fairmount Cemetery	Herb Garden Walk II	Young Audiences Concert, Dry It, You'll Like It*	MacTonight at DBG	Perennial Garden Walk II	Design for the Urban Garden*	Tea Ceremony, Field Trip to Mount Goliath, Daylily Sale
30	31	Coming Next Month				
		August 3-13 "Glass at the Gardens"	August 10 Scripture Garden Walk I	August 16 Summer Cooking With Herbs*	August 19 Japanese Tea Ceremony	August 24 Xeric Plants at DBG Seminar Section II
		August 6 Japanese Tea Ceremony	August 12 Tallgrass Prairie Field Trip, Summer Lesson in Ikebana	August 17 Xeric Plants at DBG Seminar Section I	August 22 Ornamental Trees*, Scripture Garden Walk II,	August 26 Carve-A-Summer Centerpiece Workshop

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
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NEWS

Denver Botanic Gardens

August 1989

Number 89-8



College Interns Receive Hands-On Experiences at DBG

Fresh ideas were once again introduced to the Gardens when the 1989 college interns began their 10-week internship in applied horticulture on June 12.

Each summer students in the fields of botany and horticulture work side-by-side with our professional staff, in the College Internship in Applied Horticulture program, where field trips to Colorado's various plant communities are combined with lectures and on-the-job experiences. The

interns will each work in propagation, the greenhouses, Boettcher Memorial Conservatory and outside gardens. Time will also be spent with the staff in behind-the-scenes activities maintaining the public displays.

The program continues through August 18. The following students are participants in the 1989 internship program:

Kathleen L. DiSalvo expects to

continued on page 1

Mushroom Fair is August 20

Oysters, tree ears, little pigs and a man on horseback—what's the connection with DBG, and why are you reading about them in the *Green Thumb News*?

According to the Colorado Mycological Society they're all common names of mushrooms, and the society is presenting its 14th annual Mushroom Fair on Sunday, August 20, from 11 a.m. to 5 p.m. in the Gardens' John C. Mitchell II Hall.

If you didn't know these names it's because most mushrooms aren't known by common names. Unlike green plants, the fungi aren't around long enough for most of us to get that friendly with them. However, at the fair you'll have a chance to meet around two hundred species face-to-face.

If you'd like to find out where and when you might expect to find these fascinating members of the botanical world, if you'd like to know the differences between a mushroom and a toadstool, if you'd like the answer to any of the other many questions you may have about mushrooms—this is your chance.

On hand at the fair to inform you will be members of the mushroom society and world-renowned mycologist Dr. Harry Thiers of San Francisco State University. Saturday Dr. Thiers will identify fungi freshly collected by members of the society especially for the exhibition, and Sunday he will look over and discuss your finds with you.

In addition, exhibits will illustrate many facets of the earthly pursuit of mushrooming. Photos and crafts will capture the beauty of the fungal world. You should bring your camera to photograph the natural habitat displays.

If you would like to try growing mushrooms (remember, for these plants you don't need a *green thumb*) advice will be available. The society also anticipates offering, for the first time at their fair, kits for growing your own. Mushroom books and T-shirts will be sold.

If you have an interest in eating wild mushrooms—safely—you'll find information on how to collect, prepare and preserve them. At the toxicology display you can pick up some pointers on how to stay out of trouble with mushrooms, and out of the hospital.

Admission to the Mushroom Fair is free of any additional charge beyond the Gardens' gate fee. Members of the mycological society emphasize that children are welcome. Indeed, they are encouraged to attend. For more information call Mary Alyce Write, 697-4690, or Linnea Gillman, 935-2390.

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1989 summer interns (back row, left to right) Stephanie Organ, Coleen Headrick, Tom Works, David Laliberte and Kathy DiSalvo; (front row) Teri McLain and Mary Foster

2 "Glass at the Gardens" Celebrating 10th Anniversary

Annually it's the largest exhibition in the nation of new works of glass art. This year "Glass at the Gardens" will be even bigger and brighter.

The Glass Artists Fellowship presents this show and sale August 3-13 in John C. Mitchell II Hall. The fellowship is celebrating its 10th anniversary at the Gardens with an expanded program that includes demonstrations, classes, tours and other activities centered on glass as an art and craft medium.

The exhibit will include works in several categories: juried fine art, juried fine craft, student works and small objects. Each division will have works in a wide variety of glass types.

The fine art category will be especially dazzling, with both serious and humorous artistic realizations in painted, mirrored and stained flat glass pieces, blown, slumped and etched glass, crystal, and works using assemblages of several types of glass and other materials.

For visitors who have not kept up with the advancement of glass as a fine arts medium, the show will be a beautiful revelation. Hung works prevail, but three dimensional standing works, small and large, will be available to display the extensive range of techniques and applications in modern glass art.

A new glass that made its appearance last year is expected to be better represented this year. Dichroic glass is a space-age product, developed for NASA. Its truly amazing, iridescent, clouded colors change dramatically as light is reflected or transmitted through it. This alters the art excitingly through the day wherever it is placed. New pieces in dichroic glass for this show are eagerly awaited by those who were thrilled by the few outstanding pieces shown in 1988.

Craft pieces will range from leaded lamp shades to elegant jewelry boxes. Small objects for sale include kaleidoscopes, platters, jewelry and suncatchers. Floral, animal and abstract themes are represented.

DBG members are also reminded of the special classes and tours the fellowship has arranged. These are for the Gardens' benefit. Recheck your July newsletter for the list, which included descriptions and fees, then call the education department, 331-4000, Ext. 20, to register.

The show is open from 9 a.m. to 4:45 p.m. each day except Wednesdays, Saturdays and Sundays, when it will stay open during the Gardens' evening hours until 8 p.m. For more information

Stained glass from a previous "Glass at the Gardens" show.



call the Gardens, 331-4000, Ext. 24, or director of "Glass at the Gardens," Wayne Bradbury, 751-9753 or 691-0051.

Free Day

Thursday, August 10, Denver Botanic Gardens will waive its admission fees for all Colorado residents.

Members of the Gardens, who receive year-round free admission as a benefit of their membership, are encouraged to urge nonmember acquaintances to visit the Gardens, not only this day but every day during the year. Call 331-4010 for a recorded message that lists current events.

Tributes

In Recognition of Volunteers of S.I.D.S.
(Sudden Infant Death Syndrome)

In memory of Blanche Denslow

Mr. & Mrs. John A. Atkinson

In memory of Jack Graves

Jack & Nan Deter

In memory of Herbert Gundell

Elizabeth Heacock

In memory of Minelle Halfmann

Jack & Bettye Stoffel

In memory of Charles C. Nicola

Mr. & Mrs. Barkley L. Clanahan

Mrs. Robert S. Gast, Jr.

Mrs. J.K. Malo

Perennial Garden Club

Jane Silverstein Ries

Mr. & Mrs. John T. Stoddart, Jr.

Mrs. Robert Waterman

Mr. & Mrs. William F. Wilbur

Mildred P. Yrisarri

In memory of Frances P. Sargeant

Jane Silverstein Ries

In memory of Mrs. Clark Stone

Grant & Lucile Downer

In memory of Kevin Swenby

Bill & Suzanne McCarthy

In memory of Odessa Williams

Jack & Nan Deter

In memory of Earl Wilson

Irma A. Dill

Beverly M. Nilsen

Member-Get-A-Member

Bring your friends to Denver Botanic Gardens for a visit now that each garden has come into the peak of its summer color. Encourage your friends to return on their own. We hope that they will want to join the Gardens. The Member-Get-A-Member Contest is still in effect until September 15 with benefits for you.

If your friends want to become members have them complete the application form in the July *Green Thumb News* or the contest flyer. Have them include your name, address and phone number with their application and you will receive a \$2 certificate for gift shop purchases. (These will be sent to you at the end of the contest.)

Remember also that if you are credited with bringing in five or more new members, you become eligible for the great prizes listed in the July newsletter and in the contest flyer. Additional copies of the the flyers are available at the Information Desk in the lobby or by calling the membership department, 331-4000, Ext. 22.

Denver Artists Guild Show

The Denver Artists Guild show will be at the Gardens Thursday, August 24, through Sunday, August 27. All works, representing several media, will be for sale, with prices ranging from \$100 to \$8,000. A portion of the proceeds will benefit the Gardens.

Hours of the show are 9 a.m. until 4:45 p.m.—until 7:30 p.m. on Saturday and Sunday. For more information call Denver Artists Guild president, Patricia Krekorian, 690-6419.

Green Thumb News Number 89-8 August 1989

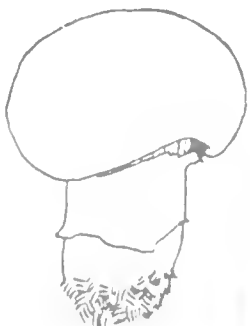
Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than July 20 for September, August 21 for October and September 20 for November.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Accredited by the
American Association
of Museums



ListenUp Garden Concerts End September 1

Summer at the Gardens has been full of great musical entertainment and it will conclude in the same fashion. The following concerts, sponsored by KCFR-FM, Denver Botanic Gardens and ListenUp Audio/Video, will provide memorable August evenings.

Music from the Santa Fe Chamber Music Festival

Thursday, August 3, at 7:30 p.m., (Raindate: Friday, August 4, at 7:30 p.m.) Tickets are \$8 each (DBG/KCFR member price is \$6 each) and went on sale at outlets July 24.

The Dirty Dozen Brass Band

Thursday, August 17, and Friday, August 18, at 7 p.m. Tickets are \$7 each (DBG/KCFR member price is \$5 each). Tickets go on sale at outlets starting August 7.

Judy Collins with JoAnn Falletta and the Denver Chamber Orchestra

Thursday, August 31, or Friday, September 1, at 7 p.m. (Raindate: Saturday, September 2, at 10 a.m.) Tickets are \$12 each (DBG/KCFR member price is \$10 each). Tickets go on sale at outlets starting August 21.

Remember to listen to KCFR-FM, 90.1, beginning at 4 p.m. on the day of each concert if bad weather threatens. For additional ListenUp Garden Concert information call 744-9999.

Electrical Work Donated

Union electricians with the International Brotherhood of Electrical Workers Local #68 and contractors belonging to the National Electrical Contractors Association have donated several thousand dollars worth of electrical work to the Gardens this year. Concertgoers have been the first to appreciate the new power in the amphitheater.



Judy Collins will perform at the Gardens August 31 and September 1.

A promotional committee formed by representatives of these unions voted to provide this work for the Gardens. Duffy Stroumbos, a representative of this committee, stated that "each year they select a project to provide electrical work for the community." DYNALECTRIC and Project Manager Bill Sterkel were chosen by the committee to complete this year's project.

Their efforts included wiring for a 100-amp panel for stage lighting and power, and a 60-amp panel along the east/west pathway. Previous projects by these electric philanthropists have been rewiring the Denver Orphanage to bring it up to code and providing electrical work for the Battered Women's Shelter.



Duffy Stroumbos (left), Bill Sterkel (center) and Greg Holdt helped oversee the new electrical work.

Chatfield Arboretum Highlights

Farm equipment, both new and old, has been receiving a lot of attention and bringing smiles of remembrance and pleasure to volunteers and visitors at Chatfield Arboretum this summer.

The most conspicuous addition has been the huge shiny, new, green and yellow John Deere 2155 tractor, which was purchased with the generous \$18,000 gift from the Associates of Denver Botanic Gardens. Equipped with a front end loader, four-wheel drive and a hydraulic lift, this tractor will supplement the arboretum's 21-year-old tractor, which has been in constant need of repair. This new tractor is "more efficient, more reliable, with at least 30 percent more horsepower," beams Chris Hartung, the arboretum's grounds keeper and caretaker.

At the other end of the spectrum, old wagons and buggies have also recently been acquired for the arboretum. Through the generosity of Dr. Woodrow Hazel, three antique wagons will be on display in the carriage barn of the Historic Hildebrand Farm. Dr. Hazel, an avid horseman, became interested in antique wagons in 1956 when he and his family purchased a mountain cabin with an aging buggy on the property. As the buggies continued to weather and show sign of much needed repair, Dr. Hazel began the process of restoration.



Hardy Water Lily Lecture by Norman Bennett

The Colorado Water Garden Society has invited members of Denver Botanic Gardens to attend a special lecture on hardy water lilies Sunday, August 13, at 2 p.m. in classroom C.

The speaker will be Norman Bennett, past president of the International Water Lily Society and retired owner of Bennetts' Water Lily Farm in Weymouth, England. Mr. Bennett, a well-known expert on growing water lilies, will illustrate his talk with slides.

Arriving in Denver directly from the Water Lily Growers Conference in Hamburg, Germany, Mr. Bennett's July itinerary will also include Marliac's in France, established by the world's foremost hybridizer of water lilies. He will include photographs and experiences of this European trip in his August talk.

Members who wish to take advantage of this opportunity to participate in the program offered by one of the Gardens' more supportive affiliated horticultural societies should arrive early: Seating in the classroom is limited.

For more information call the Gardens' public information office, 331-4000, Ext. 24.

Down the Garden Paths in August

A better title might be "Down the Garden Waterways" as the aquatic plant displays are most brilliant in August. A stroll around the main pool edge near the gazebo gives visitors a pleasing view of many water-loving plants.

Looking north across the pool is a luxuriant display of tropical, water lilies hybridized by George Pring. On the south side are Frenchman Marliac's hardy water lily hybrids.

The main distinction between hardy and tropical lilies, as you will see, is that tropical lily flowers are typically atop long stalks above the water surface. Hardies will also bloom that way when over-crowded. Within the tropical display some are day-bloomers, blooming from around 9 a.m. to 3 p.m., and some are night-blooming varieties. Watch for these (and smell them) during our extended Wednesday, Saturday and Sunday evening hours, on concert nights, or in the early morning. The night-bloomers' fragrance has been described as magical and mystical.

One of nature's largest lily pads, *Victoria cruziana* x *amazonica* (Longwood), in all its spreading splendor, resides in the center of this pool. Situated between white bulrushes,



cattails, the rare *Nymphaea flavovirens* of Mexico and the long-stalked star lilies, are the Victoria's huge circular, gas-filled leaves with sharply turned up edges present its alluring pineapple-scented flower when the sun disappears.

Don't forget the three half-barrels on the southern edge of this pool. They are filled with enchanting water plants such as the carnivorous pitcher plant, spike rushes, water hyacinths, umbrella plants, taro, sedges, tiny duckweed and a sensitive legume *Nepenthes*. Touch neptunia's leaflets and watch what happens.

At various pools around DBG you will see such "bog plants" as *Sagittaria cuneata*, with its arrow-shaped leaves, water canna, and *Spartina pectinata*, a native grass. The Scripture Garden even has a representative or two in the water flora with the blue lotus and more cattails.

Travel the various waterways this month and delight your senses with even more surprises.

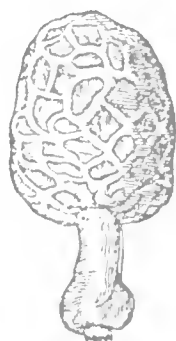
Aquatic Plant Display at May D&F Plaza

August will be the best time to visit the aquatic plant display at May D&F Plaza on the 16th Street Mall. Growing conditions are excellent and the display will be at its colorful best. This summer the plaza has come alive with water lilies and other aquatic plants all courtesy of Denver Botanic Gardens.

The focal plant of this unusual display of ornamental aquatic plants is *Victoria* 'Longwood Hybrid' and it will have grown to amazing size after bathing all summer in the reflected heat of the plaza.

This location provides a restful reprieve from the hustle and bustle of the city. When you visit it you can proudly reflect that it's a little bit of *your* Gardens downtown and you can enjoy the quiet the display provides.

Enjoy the canna plants and other aquatic plants in August.



College Interns

continued from page 1

graduate in May 1990 with a Bachelor of Science in horticulture with a nursery management specialization from Texas Tech University in Lubbock.

Mary J. Foster will graduate in December 1990 with a Bachelor of Science in horticulture from the University of Wisconsin.

Coleen J. Headrick graduated from Metropolitan State College, Denver, in June 1988 with a degree in biology.

David Lee LaLiberte will graduate in May 1991, with a Masters in Landscape Architecture from the University of Colorado at Denver.

Teresa M. McLain expects to graduate in May 1991 with a Bachelor of Science in biology with a botany emphasis from Metropolitan State College in Denver.

Stephanie Lin Organ will graduate in May 1991 with a bachelor's degree in landscape design from New Mexico State University in Las Cruces.

Thomas E. Works is a student at Montana State University, Bozeman. He expects to graduate in June 1990 with a Bachelor of Science in horticulture and landscape design.

"Red" Day at the Gardens

Wednesday, August 9, will be "Red" Day at Denver Botanic Gardens. A unique new fragrance has been created by Giorgio of Beverly Hills through a living-flower technology. To celebrate the introduction of "Red" at the May D&F stores in the Rocky Mountain region, all visitors to the Gardens on August 9 will receive a complimentary sample of this fragrance. A representative from May D&F will be distributing these samples from various locations throughout the Gardens.

Match-making Perennials with Lecturer Frederick McGourty

Frederick McGourty, the third lecturer in the 1989 Bonfils-Stanton Lecture Series, will speak on "Perennial Combinations" Tuesday, September 12, at 7 p.m. in John C. Mitchell II Hall.

Mr. McGourty is a landscape designer, nurseryman, writer, lecturer, humorist and recipient of the Distinguished Educator in Plant Studies Award from the New York Botanical Garden. He looks forward to seeing DBG's progress since his last visit 10 years ago, and to match-making common and unusual perennials with us.

For 15 years he served as editor of the Brooklyn Botanical Garden Handbook series. He coauthored *Perennials: How to Select, Grow & Enjoy* with Pamela Harper and recently, from his Connecticut home and garden, wrote *The Perennial Gardener* that is now available in our gift shop.

When writing, in his latest book, about the ease in which perennials can be relocated, Mr. McGourty said, "Many of them have traveled long distances in our garden. Had they belonged to a frequent-flyer club, I am sure a few would have earned a trip to Hawaii by now!" So as you are dividing and transplanting your old perennials this fall, why not plant complementary combinations for a long-lasting, eye-catching display?

Be sure to bring your copy of Mr. McGourty's new book for an autograph, and come prepared for an interesting, educational and entertaining evening at Denver Botanic Gardens.

Tickets may still be available. Call 331-4000, Ext. 20, for further information.



Perennial expert and author Frederick McGourty

Fiesta of Flowers Evening of August 9

You are invited to "Escape to Your Gardens" again on Wednesday, August 9, for an exciting late-summer evening of music and other fun for your family.

We're calling this last "Escape" of the year a Fiesta of Flowers, because everything we've planned — music, dance and a special activity for children — is going to have a distinctly Latin flavor, and the Gardens' floral beauty will be at its peak.

As usual for a summer Wednesday the Gardens will be open until dusk. You'll have plenty of time to enjoy a picnic supper and a twilight stroll, and still enjoy the entertainment.

There will be no charge for any of the activities beyond the Gardens' regular gate fees. Take this opportunity to bring your nonmember friends to your Gardens for a pleasant summer evening, surrounded by the late-summer beauty of our many flowering displays.

For more information about the Fiesta of Flowers call 331-4000.

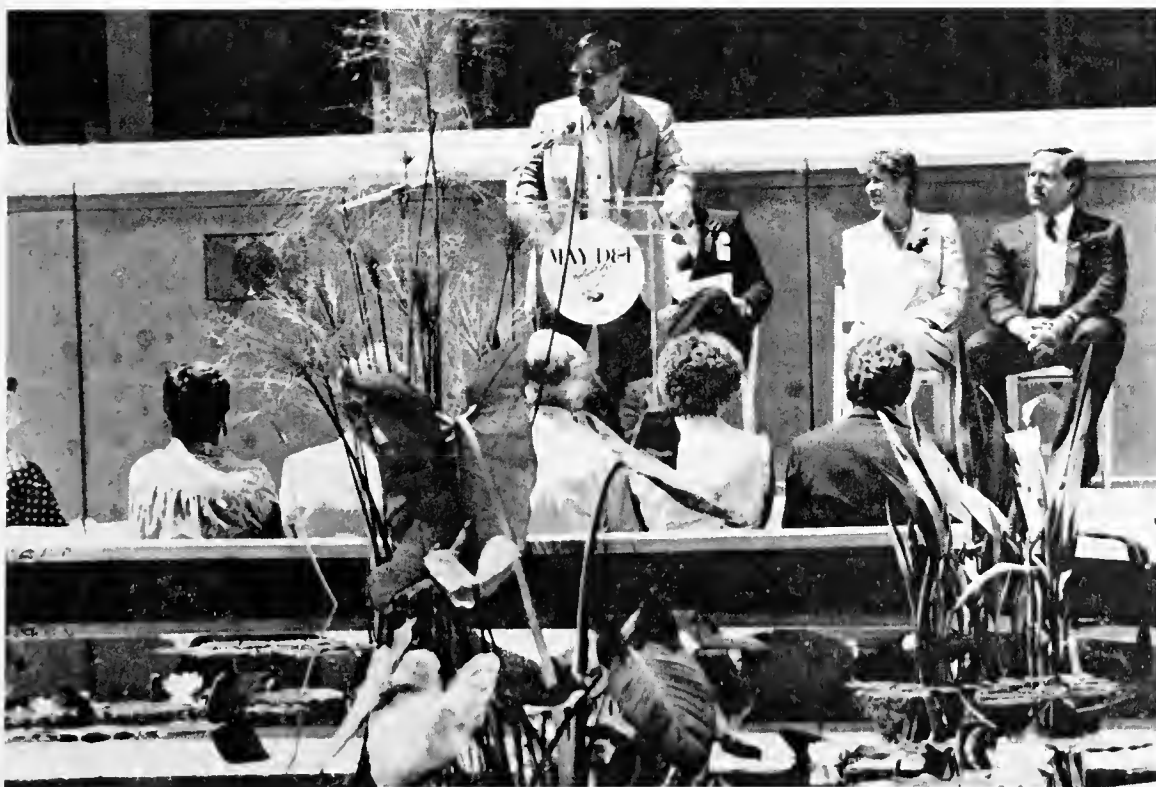
Men's Garden Club Sale

The Men's Garden Club of Denver will hold its annual sale of plants and home-grown produce in the parking lot of Botanic Gardens House, 909 York Street, Saturday, September 2.

The Men's Garden Club of Denver is, in their words, "a group of gardening enthusiasts interested in perpetuating the beauty of our surroundings, growing food for table use and sharing our knowledge and experiences with others." They actively support both the Gardens and Chatfield Arboretum.

The sale begins at 9 a.m., continuing until 5 p.m. For more information call Paul Groeger, president, 978-9736.

Don't miss the aquatic plant display downtown at May D&F Plaza.



Summer
1989

Denver Botanic Gardens

CLASSES



Tallgrass Prairie Field Trip

Saturday, August 12
10 a.m. to 2 p.m.

Observe a good example of tallgrass prairie along Highway 93 between Golden and Boulder. The dominant species is big bluestem but many other grasses such as switch grass, needle-and-thread, little bluestem, and side oats grama will all be seen at their peak. Fall flora including several asters, blazing stars and golden-rods will also be seen.

Please bring a plant identification book and a hand lens if you have them, and don't forget your lunch.

Meet: promptly at 10 a.m. 3.3 miles north of Highway 58 (Golden) on Highway 93, at the dairy just north of 58th Avenue, on the east side of the highway.

Instructor: Paul Kilburn, Ph.D., has taught botany and ecology in Illinois and Colorado for many years.

Fee: \$5 members/\$5.50 non-members

Limit: 20

Xeric Plants at Denver Botanic Gardens — A Seminar for Colorado Nurserymen

(one session)

Section I: Thursday, August 17
Section II: Thursday, August 24
8 a.m. to noon Classroom C

(Please indicate your section on the registration form.)

Nursery people are "on the front line" in educating the public—their customers—about drought-tolerant plants and water conservation in the landscape. This is an opportunity to increase your knowledge of xeric plant characteristics and horticulture, using the collections at Denver Botanic Gardens.

Look at selected plants, discuss their origin and growth characteristics, horticultural and maintenance needs, landscape uses, availability, and care in the nursery.

Please note that this is a course for professionals in the nursery industry, such as nursery owners, sales people and growers.

Instructor: Gayle Weinstein is director of plant collections at Denver Botanic Gardens.

Fee: \$16 members/\$18 non-members



Night-Blooming Nymphaeas

Sunday, August 27
7:30 - 9:00 p.m.

Come see the mysterious and colorful night-blooming tropical water lilies. This year three giant Victorias will be displayed. With a little luck they will open on cue at sunset and fill the air with their sweet fragrance. It promises to be an exciting and memorable occasion.

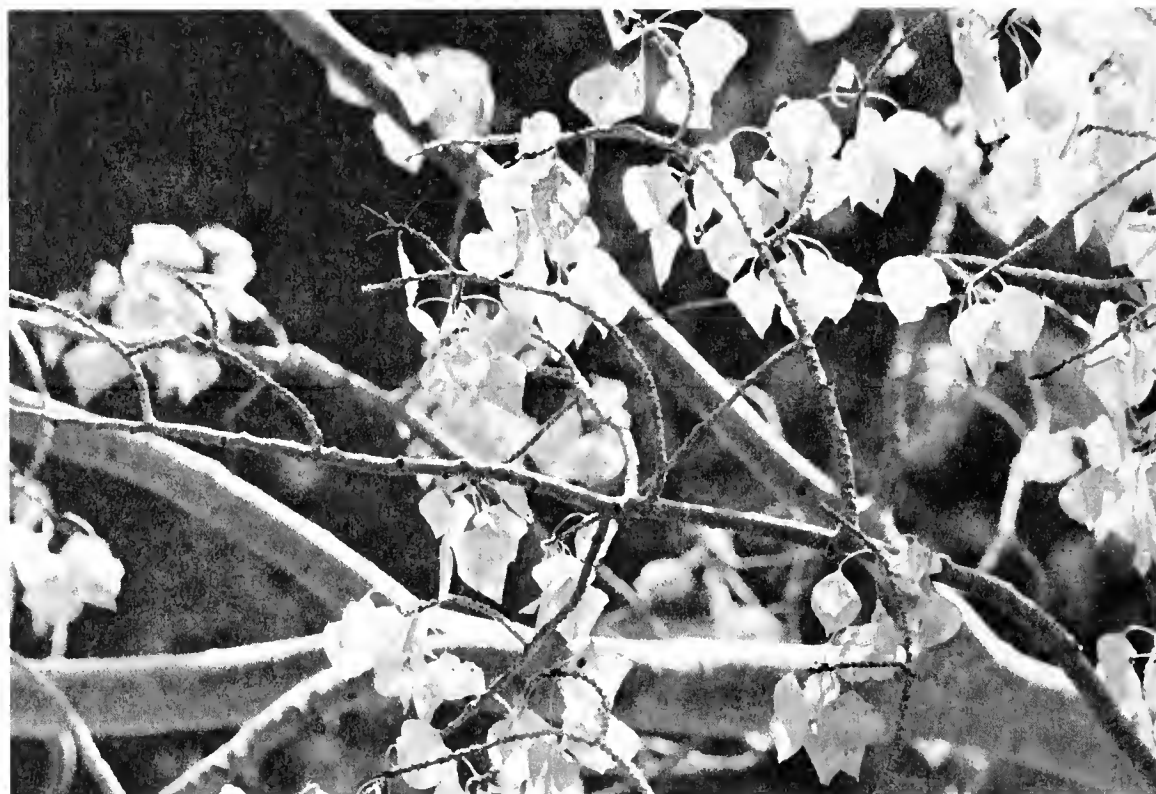
Cultural information will be provided in the cool of the evening and time will be allowed for questions and photography.

Meet: at the main pool promptly at 7:30 p.m.

Instructor: Joe Tomocik is a gardener-florist II at DBG and is responsible for maintaining the DBG water gardens.

Fee: \$6 members/\$7 non-members

Limit: 20



Ornamental Trees for Colorado

(four sessions) Classroom C

Tuesdays, August 22, 29 and September 5, from 7:15 to 9:15 p.m. and field trip on Sunday, September 10, from 9 a.m. to noon

Just in time for fall planning and planting, this course will emphasize fall color. Identify and examine the landscape value of over 50 species of ornamental trees that are hardy in the Denver area. Students will observe slides of the plant material while the instructor discusses their cultural requirements and provides planting hints.

Instructor: Jeffrey Frank studied landscape architecture at Pennsylvania State University and the University of Virginia and is presently employed as a landscape architect.

Fee: \$36 members/\$40 non-members

Golden Aspens and Their Natural History

(one session)

Thursday, September 14
6:30 to 8:30 p.m.
Morrison Center at Denver Botanic Gardens

Do you know that aspens are one of the most widely distributed trees in the lower 48 states?

By viewing slides participants will learn about the plants and animals associated with Colorado's aspens. In addition to learning about the general natural history of aspens, students will learn why some aspens reproduce by seed and why others reproduce by suckers and you'll find out why one aspen grove can be a totally different color from neighboring aspen groves during the fall.

Instructor: Tina Jones is a popular field trip leader and naturalist and has studied alpine ecosystems at the

University of Colorado, Boulder, Research Station outside of Ward.

Fee: \$8 members/\$9 nonmembers

Scripture Garden Walk

Section I: Thursday, August 10
10 to 11 a.m.
Section II: Tuesday, August 22
7 to 8 p.m.

The Scripture Garden was designed to provide a visible link with the people and events of the Bible. Plants that grow in this garden are descendants of those that grew in the Holy Land thousands of years ago.

Leader: Gayle Weinstein is director of plant collections at DBG and oversees our plant collections.

Meet: at the Scripture Garden (rain or shine). Walks begin promptly.

Fee: \$4 members/\$4.40 non-members

Limit: 20

Summer Cooking with Herbs

(three sessions)

Tuesdays, August 15, 22, 29
6 to 8:30 p.m.
Morrison Center at DBG

Learn to use fresh herbs to add zest and variety to your cooking in this hands-on course. Students will undertake various techniques of herb cookery as they prepare appetizers, soups, salads and main dishes to be savored in the cool of the garden at the conclusion of each evening. The recipes chosen will be easily prepared and will emphasize the abundant fresh produce of late summer.

Sample grilled chicken breasts with coriander, cucumber and tomato relish; pasta and fresh pesto; cold sorrel soup; rose geranium ice cream; and a host of seasonal salads.

Please bring an apron, a sharp knife and a place setting to each class.

Instructor: An avid herb gardener and an enthusiastic cook, Pat Pachuta is also education director at DBG.

Fee: \$48 members/\$53 non-members (includes \$18 for three dinners)

Limit: 12

Natural Style Flower Arranging

(four sessions)

Wednesdays, August 9, 16, 23, 30
7 to 9 p.m. **Classroom B**

Those who are busy during the day will find this course a lovely way to relax and study basic flower arranging in a natural, open style. Participants will have the opportunity to learn how to choose and cut floral materials as they select materials from our Cutting Garden to make arrangements during class.

Create floral arrangements that reflect the gorgeous late summer bounty of our gardens. Students are encouraged to bring whatever personal materials they may have to add even more interest and variety to their work.

Please bring your own containers and flower snips as well as a container (a small bucket is perfect) for holding water and flowers when cutting materials. A piece of floral foam or a needle-point flower holder and wire cutters or pruning shears will also be useful.

Instructor: An experienced floral designer and teacher, Julia Dobbins has studied floral arranging extensively both in the United States and England.

Fee: \$32 members/\$35 non-members

Limit: 12

Summer Lesson in Ikebana

Saturday, August 12
9:30 to 11:30 a.m.
Morrison Center at DBG

This summer workshop is an introduction to ikebana, but can also serve as a refresher course for students who have completed the "Beginning Ikebana Lessons" class.

Please bring the following materials to class: round or rectangular ceramic container (no smaller than 12 inches long and two inches deep), two needle-point flower holders (one that is two inches wide and one that is three inches wide or larger), sharp clippers, small bucket (or other container to hold flowers and water) and notebook.

Although flowers will be provided, students should bring their own line material (branches) cut from their yards.

Instructor: Joan Wooldridge is past president of Ikebana International and has teaching certificates in two schools.

Fee: \$10 members/\$11 non-members

Limit: 12

Japanese Tea Ceremony

(one session) **2 to 3 p.m.**

Section X: Sunday, August 6
Section XI: Saturday, August 19
Section XII: Saturday, Sept. 9
Section XIII: Sunday, Sept. 17
Tea House in DBG's Japanese Garden

(Please indicate your section on the registration form.)

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

Fee: \$4.50 members/\$5 nonmembers

Limit: 15



Watercolor Workshop

(one session)

Wednesday, August 23
9:30 a.m. to 3:30 p.m. **Classroom B**

Spend a day in the Gardens capturing the glory of August's flowers in watercolor. The course includes exercises in perception and instruction in the stages of developing a painting. An elementary understanding of watercolor is preferred.

Bring watercolor supplies, drawing paper and charcoal, something to sit on and a lunch.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$22 members/\$24.25 nonmembers

Limit: 12

Watercolor Painting

(five sessions)

Wednesday, September 13, 20, 27,
October 4, 11

Section I: 9:30 a.m. to 12:30 p.m.
Section II: 6:30 to 9:30 p.m.

Morrison Center at Denver Botanic Gardens

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: one-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane

Fee: \$60 members/\$66 nonmembers

Limit: 12

Beginning Botanical Illustration

(six sessions)

Tuesdays, September 12, 19, 26,
October 3, 10, 17
Classroom B* 9:30 to 11:30 a.m.
(The first class will meet in classroom A)

This introductory course will stress accurate drawing of flowers, roots, stems and leaves. Fresh plant material will be used for each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first class.

continued on page 8

*Facing page:
Learn more
about aspen
communities in
Colorado from
instructor Tina
Jones.*



continued from page 7

A combination beginning and continuing botanical illustration class will begin October 24. Watch for this information in the September newsletter.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$54 members/\$59 nonmembers (includes \$6 for materials)

Limit: 15

Carve-A-Summer-Centerpiece Workshop

Saturday, August 26

10 a.m. to noon

Morrison Center at DBG

Be the first to learn how to design creative centerpieces from your harvest of late-summer vegetables and fruits. Carve an elegant or fun centerpiece that can be lit with candles for evening parties. They can also serve as containers for flowers and will certainly be a conversation piece.

Begin with a watermelon and soon you'll be carving giant zucchinis, eggplants and cantaloupes at home. Nothing will escape your knife! Using a special carving kit you can become wildly creative and turn an ordinary vegetable into a masterpiece.

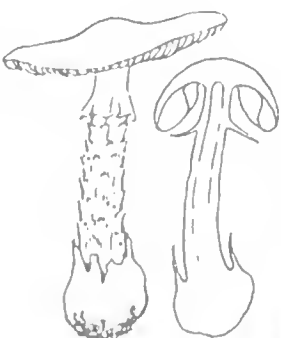
Please bring one or two small watermelons to class.

Instructor: Tina Goldstein is a fiber artist who studied at the University of Northern Colorado. She is a champion pumpkin carver and an enthusiastic teacher who has taught pumpkin carving classes at the Gardens.

Fee: \$10 members/\$11 non-members (Fee includes one carving kit.)

Limit: 20

Create a summer centerpiece from watermelons.



New Conservatory Guides Begin Training September 19

Volunteer as a conservatory tour guide and you'll discover the best way to learn about the Gardens and its "jungle." A 10-week class beginning Tuesday, September 19, at 9:30 a.m. will prepare you to share your enthusiasm and plant knowledge with our many visitors.

You will learn about plants that grow on others (epiphytes) and the tiny worlds that exist inside some of them. You'll discover some of the economic values of our plants and see the vanilla orchid that produces the bean used to make vanilla extract. Become a banana hunter and by learning about the growth habits of this popular plant you will be able to point them out easily on tours.

Students spend the first half of each Tuesday class session in a lecture and the last half in the conservatory. Prior to the conclusion of the training you will be encouraged to join experienced guides on scheduled tours to observe tour techniques.

Class size is limited. Registration is \$25 and this provides a notebook chock-full of valuable information. To



register use the education department registration form in this newsletter, or call 331-4000, Ext. 20, for additional information.

The tour season for the conservatory runs October 1 to May 1. Tours are requested mostly by school groups, but adult groups are also led through each month. Very few weekend tours are scheduled.

The guide program has an active group that meets frequently. The first training class begins in classroom B. The enthusiasm of visitors who benefit from your guided tours will make all of the training worthwhile.



Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

35 Garden Blueprints: Beautiful Possibilities for Designing Your Garden

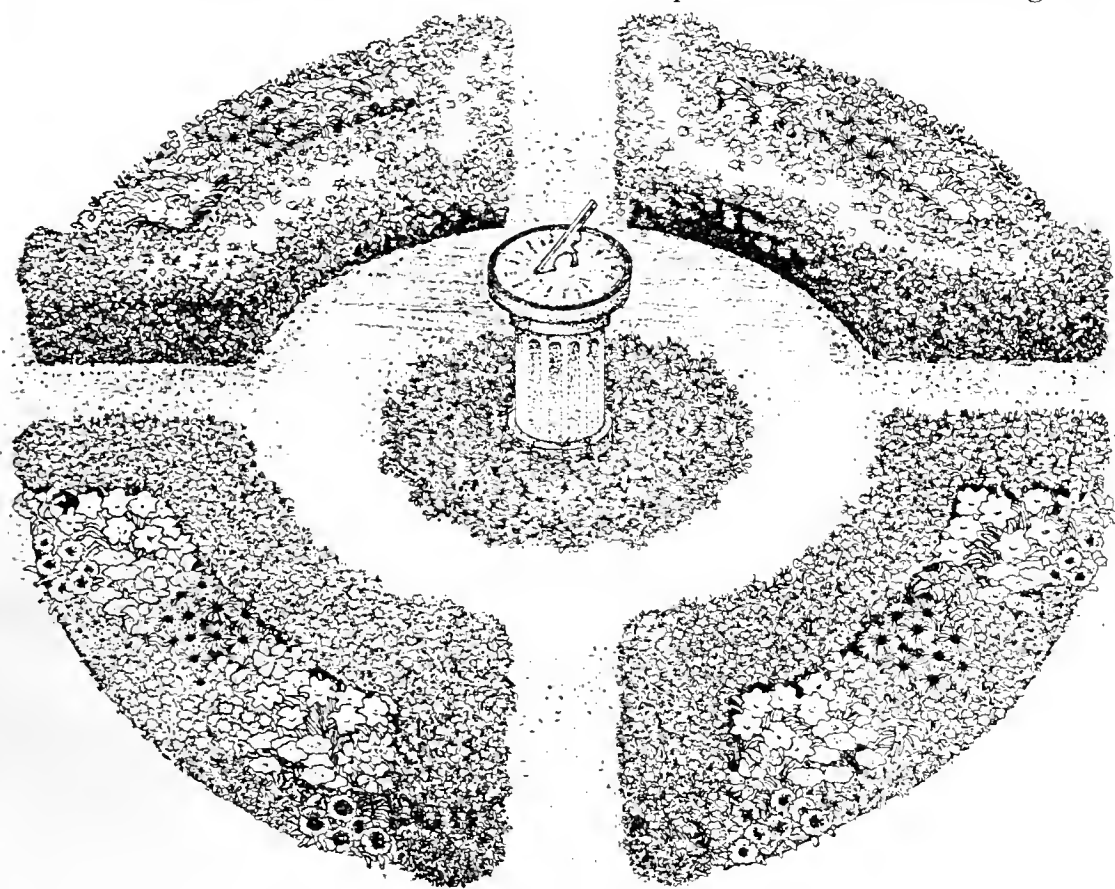
Text and garden designs by
Maggie Oster, illustrations by
Grace Tvaryanas. Simon and
Schuster, New York, 1989. \$14.95.
SB 473.Q8 1989

This book is a new and clever presentation of garden plans. The standard method used for garden plans is the same as that for house plans: two-color diagrams showing the positions and sizes of plants from an overhead view. The method works for houses and we can all imagine the effect produced by doors and windows. But it's

from bending the rules of perspective to give an easily imagined view.

The plans include perennial gardens, an Italian garden and an everlastings garden. The various plant lists include as many as 60 species, for the herb garden, and as few as five, for the parterre garden. Plant combinations are chosen for color and size. Common names, Latin binomials and varieties are given, and a list of sources appears in the appendix. The plants in the lists must grow anywhere and so are mostly common, hardy species. It's disconcerting to think that a gardener in Savannah might end up with a garden identical to one in Seattle, but that's a real possibility with these universal species.

Despite the obvious advantages of



much more difficult to imagine a garden from such plans.

The character of a garden is so strongly influenced by form and color that only someone with an encyclopedic memory of plants can evoke the flavor of a garden from traditional outlines. The plans in this book contain color drawings of real plants. The views are overhead but the artist doesn't flinch

the book, the plans themselves are not the strong point. The layouts, many of them based on real gardens, are not very exciting. But they are very accessible to most gardeners and useful at all stages of garden planning.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder

Garden Open Today

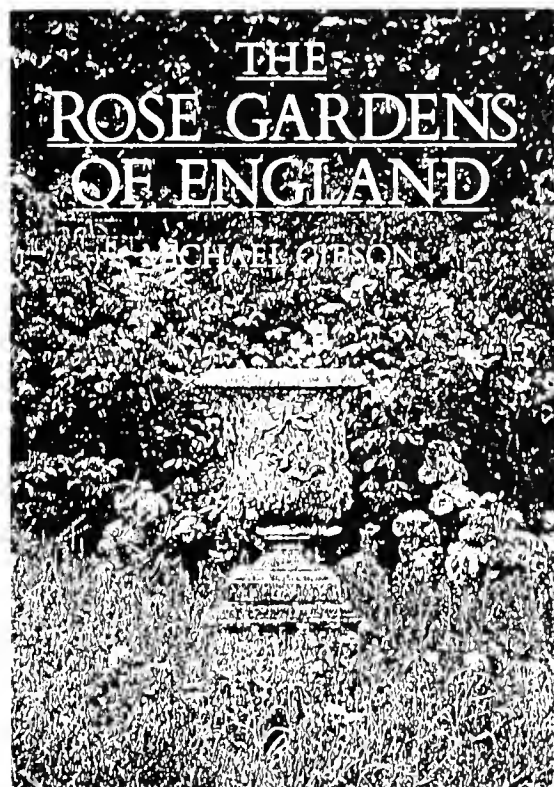
Edited by Martyn and Alison Rix.
Viking, N.Y., 1987. \$19.95.
SB 466.G8 G37 1987

This book is a must for plant lovers who travel to England. Few things can be more depressing than to visit the country only to return and hear

about an absolutely wonderful garden whose existence had hitherto been a secret.

Profusely illustrated, this practical book includes gardens open to the public in Britain's National Gardens Scheme.

Alphabetical in arrangement, this book includes directions to the gardens as well as chatty little anecdotes about the evolution of each garden,



The Rose Gardens of England

By Michael Gibson. The Globe
Pequot Press, Connecticut, 1988.
\$21.95. SB 411.5.G8 G5 1988

England and roses are synonymous, and this beautifully illustrated book provides a tour to some of England's rosiest best.

Such practical necessities as directions to the gardens, owners' names and phone numbers, and open dates are included for each garden.

Garden origins, planting descriptions and species names are also included.

Step-by-step and scent-by-scent guides to each garden are so complete that it is almost possible to enjoy rose-scented air just from reading the delightfully informative descriptions.

Garden lovers traveling to England will find this book invaluable both in creating an itinerary and later in reliving fond memories.

Now then, let's have our tea in the sunny, scented rose garden there by the old stone wall.

Joan Hinkemeyer
Library Volunteer

soil and planting particulars and elements of design.

No grand remote gardens here: Each one sounds so cheerful and inviting it's a pity Great Britain is so far away.

Joan Hinkemeyer
Library Volunteer

LIBRARY JOURNALS

Helen Fowler Library
Volume 12, No. 3
August 1989
Librarian:
Solange Gignac





The National Wildflower Research Center's Wildflower Handbook

Edited by Annie Paulson. Texas Monthly Press, Austin, 1989. \$9.95. SB 439 N26 1989

A few months ago I visited the National Wildflower Research Center outside of Austin. At the end of the long entrance road lined with Indian blanket (*Gaillardia pulchella*), I parked next to cars and trucks sporting bumper stickers declaring "Wildflowers Work!" Anyone who has casually tried a packet of wildflower seeds will understand the need for this slightly defensive sticker. But once you read this book, you'll be persuaded that wildflowers can work, if you follow all the recommendations here.

The first section contains a mixture of philosophy and practical advice on everything from buying bulk seed to re-creating a prairie. Low-maintenance landscaping, wildlife gardening and buffalo grass lawns each receive a chapter. We are even told how to organize a roadside wildflower project. More than half the book is composed of informational resources, bibliographies and sources of seeds and plants. An extensive table gives common names, origins, life cycles, exposures, site preferences and seeding rates for hundreds of species. It does not include germination requirements.

You may discover the error of your ways with wildflowers: Like me, you probably tried too many non-natives on a poorly-prepared seedbed that you have not kept moist for germination! You may not have provided good soil-seed contact. You probably let weeds strangle the seedlings and set your mower too low. If you're beginning to think that doing it correctly sounds like a lot of work, it is—but surely not more work than starting a perennial bed or growing blemish-free roses, and definitely less work in the long run.

There are no fancy beds at the center showing how to incorporate wildflowers into your *nouveau* cottage garden. This is clearly serious business. But if you don't believe your own small efforts will contribute to wildflower conservation, and you're put off by the labor, why bother? The answer will come to you as soon as you skim the species lists. These are the flowers of childhood, simpler flowers from a simpler time, lovely and evocative and worth trying.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder

Native Texas Plants Landscaping Region by Region

By Sally Wasowski with Andy Wasowski. Texas Monthly Press, Austin, 1988. \$32.95. SB 439.24.T4 W3 1988

Texans have a knack for exploiting their natural resources, including their native plants. As a fourth generation Texan I took pride in those stunning springtime displays of bluebonnets for which the state is famous until I learned that the Highway Department had been sowing seed since 1929. The same fields suddenly seemed artificial and faintly dishonest. I've since come to believe that augmenting and mimicing nature is a great idea, a view shared by this author.

The first part of the book gives plans for native-plant gardens in every region of the state. Each section includes a photograph of both a natural and a man-made landscape. I can vouch for the fact that the natural area photographs capture the essence of the different regions. I assume the garden photographs are equally informative. If so, native plant gardens aren't perfect substitutes for ones filled with exotics, despite claims to the contrary. They're less showy since the flowers are generally smaller, they're messier since there is more variation in plant height and they're far less interesting.

The second part of the book is divided by plant groups, including ground covers, perennials and grasses. These sections have both plant descriptions and plans. The instructions for making a plan and putting in a border or rock garden are the clearest I've read. The descriptions are filled with pointers on the best use of each plant, pest problems and natural history, all done in a readable, informal style. The book concludes with a bibliography, a list of public native plant landscapes and a who's who in native landscaping, an impressive array of public and private organizations throughout the state.

Extensive cultural information isn't given, primarily because it isn't needed. Ms. Wasowski recommends that you get a plant established by watering fairly often the first couple of years and then "leave it alone, to do or die." Her *laissez faire* attitude extends to weed control and soil preparation. Most of Texas is subtropical and many of the plants are endemics so we won't be able to find congeners for our gardens. Nevertheless, I came up with several ideas and ended with the conviction that this kind of gardening can work for anybody.

Alcinda Cundiff
Research Associate, Dept. of EPO
Biology, University of Colorado,
Boulder

Gardening: Make Cuttings for Indoor Gardens

Few things lift the spirits like walking into a room with flowering plants at the window—in the middle of winter. And few things sadden a gardener's heart like viewing the last of summer's annuals cut down by frost.

Each year, upon the weatherman's announcement of the fall's first killing freeze, we scurry to bring in patio containers, dig and pot up geraniums, and wish we could have just a few more weeks to enjoy the blooming plants that are, finally, looking so beautiful outdoors.

If you'd like to hang on to those summer flowers through the winter, don't be tempted to transfer those outdoor plants indoors. You run the risk of bringing with them a host of pests, as well. In addition, your old plants will need quite a bit of grooming before they'll be presentable for the closer scrutiny they'll receive close up and at eye level in the house. Finally, you're a gardener, and you enjoy working with plants, and you'll enjoy starting your indoor flower garden with new plants, propagated by cuttings from your old ones.

The time to prepare is now. Before the nights begin chilling toward autumn is the time to take cuttings of plants for flowering indoors in the winter. Not only are the plants in better condition, but so is your home: The central heating hasn't been turned on to make the transition between cool, humid night conditions outdoors and the warm, dry atmosphere indoors a difficult one for the plants.

You don't need elaborate equipment to make your own cuttings. A greenhouse with automatic misting and thermostatically controlled bottom heat is not necessary for most herbaceous plants such as the ones you'll be propagating.

What you will need is a sharp knife, rooting hormone, sterile potting medium and several transparent plastic bags. (Rooting hormones are available at most nurseries and greenhouses.) Make sure your knife is very sharp. A dull knife or regular garden clippers mash the plant tissue, opening the way for deteriorating fungi and bacteria. Rooting hormone stimulates the cuttings into forming more roots, faster. The potting medium should be very loose and full of air, yet capable of holding moisture: pure small perlite, a mixture of perlite and peat moss, a mixture of coarse sand and peat moss, or any other such substance. The plastic bags will form your greenhouses, an individual one for each type of plant.

Begin by moistening the soil you've chosen, draining it and placing about two inches of it into the bottom of each plastic bag.

Choose vigorous plant material for your cuttings. It should be neither old and woody nor overly lush and rampant. Get rid of any insect pests a day or so before you begin the project.

Make the cut down from the tip about three to six leaves, or sets of leaves, slicing straight across the stem just below the point where the leaf or leaves are growing. Remove enough bottom leaves from your cutting to be able to insert your cutting in the rooting medium with no leaves below soil level.

Then dip the cut end of your soon-to-be new plant into the hormone powder and lightly tap off any extra powder. Make a hole in the rooting medium, insert the cutting only deep enough to assure that it stands upright, and firm it in, but lightly. Space subsequent cuttings about two

inches apart. Depending on the size of your miniature greenhouse, continue with more cuttings until it is full.

Zip or tie closed the top of the plastic bags and place them in a warm, very bright but not sunny spot where you can keep your eye on them. Check them every day or so. If it appears too humid, open the bag slightly for a few minutes to release some moisture, then reseal the bag. If the soil appears to dry out, spritz the cuttings well and again close the bag tightly.

One advantage to "baggie propagation"—impatient gardeners love this—is your ability to observe your cuttings closely. Just a little bit of poking with your finger will reveal whether or not they've rooted.

When the new roots are a quarter- to a half-inch long pot your new plants up, making sure you water them in thoroughly. Your winter garden has begun.

Larry Latta is botanist-horticulturist for public information at DBG.



The wildflower conference in Wyoming will address utilizing our native resources.

Wyoming Wildflower Conference

A conference for wildflower enthusiasts titled "Wildflowers: A Lasting Legacy" is set for this September 8-9, in Cheyenne, Wyoming.

The planting of wildflowers is being supported as a Wyoming Centennial project, in celebration of the state's 100-year anniversary of entering statehood. Volunteers are planting wildflowers at selected rest areas and along highways throughout the state.

Along with this wildflower planting effort organizers are planning a conference on wildflowers to cover issues

related to highway wildflowers, economics of wildflower planting, maintenance, and the nuts and bolts of establishing wildflowers in large and small areas. The conference will feature experts from Denver Botanic Gardens, the National Wildflower Research Center and the Idaho Highway Department.

"Wildflowers: A Lasting Legacy" will be at the Hitching Post Inn in Cheyenne. For more information write: Wildflowers, P.O. Box 1003, Cheyenne, WY, 82003, or call 307-634-8816.

C AUG

A L E N D A R

S

*First meeting of a class with more than one session

6

Japanese Tea Ceremony

13

Hardy Water Lily Lecture

20

Mushroom Fair

27

Night-Blooming Nymphaeas, Art Show and Sale

Coming Next Month

September 1
Judy Collins with JoAnn Falletta and The Denver Chamber Orchestra

M

7

14

21

28

September 2
Men's Garden Club Sale

September 9
Japanese Tea Ceremony

T

1

8

15

22

Ornamental Trees*, Scripture Garden Walk II

29

September 12
Bonfils-Stanton Lecture, Beginning Botanical Illustration*

September 13
Watercolor Painting*

W

2

August 3-13
"Glass at the Gardens"

9

Fiesta of Flowers, Natural Style Flower Arranging*

16

Summer Cooking with Herbs*

23

Watercolor Workshop

30

September 14
Golden Aspens and Their Natural History

September 17
Japanese Tea Ceremony

T

3

Music from the Santa Fe Chamber Music Festival

10

Scripture Garden Walk I, Free Day at Gardens

17

Xeric Plants at DBG Seminar Section I, The Dirty Dozen Brass Band

24

Xeric Plants at DBG Seminar Section II, Art Show and Sale

31

Judy Collins with JoAnn Falletta and The Denver Chamber Orchestra

September 19
Conservatory Guides Class*

F

4

11

18

The Dirty Dozen Brass Band

25

Art Show and Sale

S

5

12

Tallgrass Prairie Field Trip, Summer Lesson in Ikebana

19

Japanese Tea Ceremony

26

Carve-A-Summer Centerpiece Workshop, Art Show and Sale

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.



Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

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August 1989

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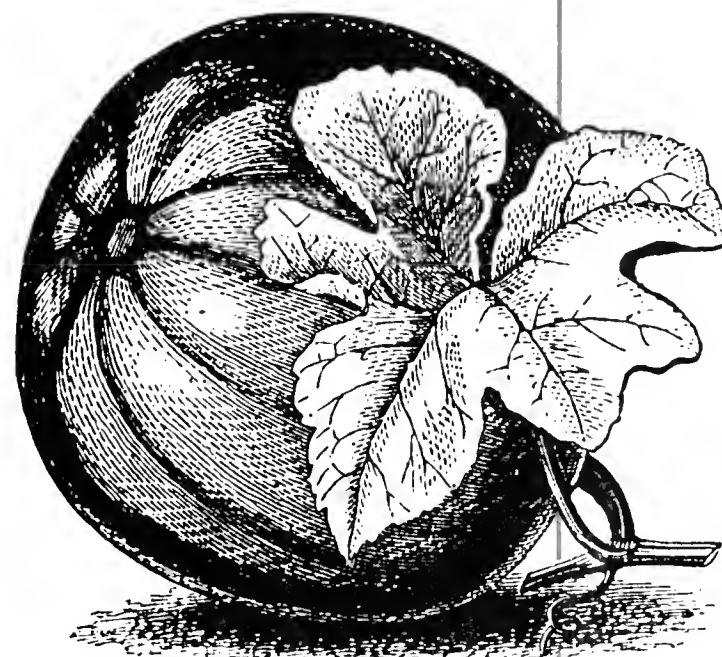


NEWS

Denver Botanic Gardens

September 1989

Number 89-9



Open House, Nature Center Dedication, Pumpkin Festival and More at Chatfield Arboretum



Inside:

*Bonfils-Stanton
Lecture
page 2*

*Conservatory
Guide Class
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*Chatfield
Highlights
page 4*

*Pumpkin
Festival
page 5*

*Day of
Discovery
page 6*

*The Polly Steele
Nature Center
at Chatfield
Arboretum has
received a lot of
attention this
summer.*

If you missed the members-only open house at Chatfield Arboretum in mid-July, you will have another opportunity. The arboretum will again be open, free to the public, on Saturday, September 23, from noon until dusk.

There are many new features to be viewed this fall. A new orchard surrounds the historic Hildebrand farm-

stead, with three vintage wagons on display in the stable area. More than 2,500 saplings have been planted in new windbreaks that within six years will be as tall as the shelter belt on the northwest property line. The newly reconstructed Polly Steele Nature Center (see adjoining article) will be open for your enjoyment, with educational displays both there and in the School House-Visitor Center. Theme-

oriented guided tours, of varying lengths will depart from the Visitor Center every half hour.

Hayrides by tractor will be provided throughout the afternoon, and the large-barrel barbecue near the gazebo will be available for your personalized picnic. So bring your picnic, meat to grill and family and enjoy an early autumn day at Chatfield Arboretum.



Attendees of the Garden Writer's Conference met Former First Lady Betty Ford in Vail.

Speaker Mary Tonetti Dorra Presents "Giverny—The Garden of Claude Monet"

Travel with Mary Tonetti Dorra and Denver Botanic Gardens to "Monet's Giverny: A Painter's Garden," Tuesday, October 10, for the next Bonfils-Stanton Lecture.

Mrs. Dorra invites us to compare contemporary slides of Monet's restored garden in all three blooming seasons with paintings of the same.

Monet's Giverny and the history of classical 17th and 18th century French gardens are Mrs. Dorra's forte. Garden clubs, horticultural associations and art and natural history museums across the country have hosted her presentations.

Mrs. Dorra's article "Giverny—the Garden of Claude Monet" was published in the *Garden Club of America Bulletin* and in the *Brooklyn Botanic Garden Record*.

She has written and lectured on notable gardens and her name has been placed on the Garden Club of America's speakers list.

The opportunity to surround your senses in slides of Giverny and paintings of Monet, delivered in a most interesting and humorous fashion, may be a long time returning Denver. Only a few tickets remain, so secure them now.

All lectures in this series begin at 7 p.m. in John C. Mitchell II Hall. The final speaker in the Bonfils-Stanton Lecture Series is American garden "revolutionary," James van Sweden. Tickets for this Tuesday evening, November 14, lecture may be obtained by calling the education department at the Gardens, 331-4000, Ext. 20. Tickets for Frederick McGourty's perennial lecture, September 12, may still be available so call soon and reserve your seat! Member tickets are \$3 and nonmember tickets are \$6 each.

Allied Artists Guild Exhibit

Denver Botanic Gardens feels a natural affinity with the arts: Art seems a very proper response to plants. Several different arts organizations display their works here at various times throughout the year.

Thursday through Sunday, September 21 to 24, a new group (to us) joins the Gardens to host an early autumn exhibit. Denver Allied Artists Guild will present artworks in many media and genres, including both sculpture and flat works.

Hours of the show will coincide with the Gardens' regular hours, 9 a.m. to 4:45 p.m. each day. There is no charge to view the show beyond the nonmember gate fees. For more information, call 331-4000, Ext. 24.

Tributes

In memory of Doris Heller

Douglas Heller
Jon Heller
Kenneth J. Heller
R. B. Heller
Mrs. Bruce Katchen

In memory of Elizabeth Rendle Myer

Mr. & Mrs. Harlan H. Holben

In memory of Charles C. Nicola

Mr. & Mrs. Donald C. Campbell

In memory of Mrs. Russell Ortquist

Mr. & Mrs. Ken Guant

In memory of Mrs. Verle Tetherow

Mr. & Mrs. Allan Mulholland

Green Thumb News

Number 89-9 September 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than August 21 for October, September 20 for November and October 20 for December.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Conservatory Guides: Refresher Courses in September

The new tour season is approaching! The time has come for guides to attend brush-up classes in September. In a two-hour session guides will see and learn about the changes that have occurred in the conservatory since May.

The first class meets in classroom C on Tuesday, September 12, from 9:30 to 11:30 a.m. There will be a pot-luck picnic lunch at noon for the guides afterward at the Gardens. Please bring a favorite dish or salad to share with the other guides. Rolls, drinks and dessert will be provided. Call Phyllis Dill, 771-4055, for more picnic details.

Two other brush-up sessions will meet in September. The season begins October 1 so it is important that continuing guides attend one of the sessions. There will be a class starting at 9:30 a.m. on Tuesday, September 19, and another on Thursday, September 21, from 10:00 to 11:30 a.m.

Continuing education is valuable to volunteers in the guide program. New guides will gain from attending the brown-bag lecture series offered throughout the year, and returning guides already appreciate the value of these lectures.

The series begins October 14 with review and introduction to the "new" SKIP kit. Future lectures are on the second Tuesday of the month, through April 10. Topics will include a slide presentation of tropical plants, a discussion of the tropical trees in the conservatory and varying aspects of the tropical community. This will cover animals, insects and microclimates. Guest speakers have been invited to present this information. Bring your lunch and explore the community of the conservatory and improve your understanding of the tropics. You will discover that you and your tour groups will benefit considerably from this new knowledge.

You need not register in advance to attend the brown-bag lecture series. Additional information will be mailed to all guides, new and returning, each month with your tour schedules.



A Reminder to New Conservatory Guides

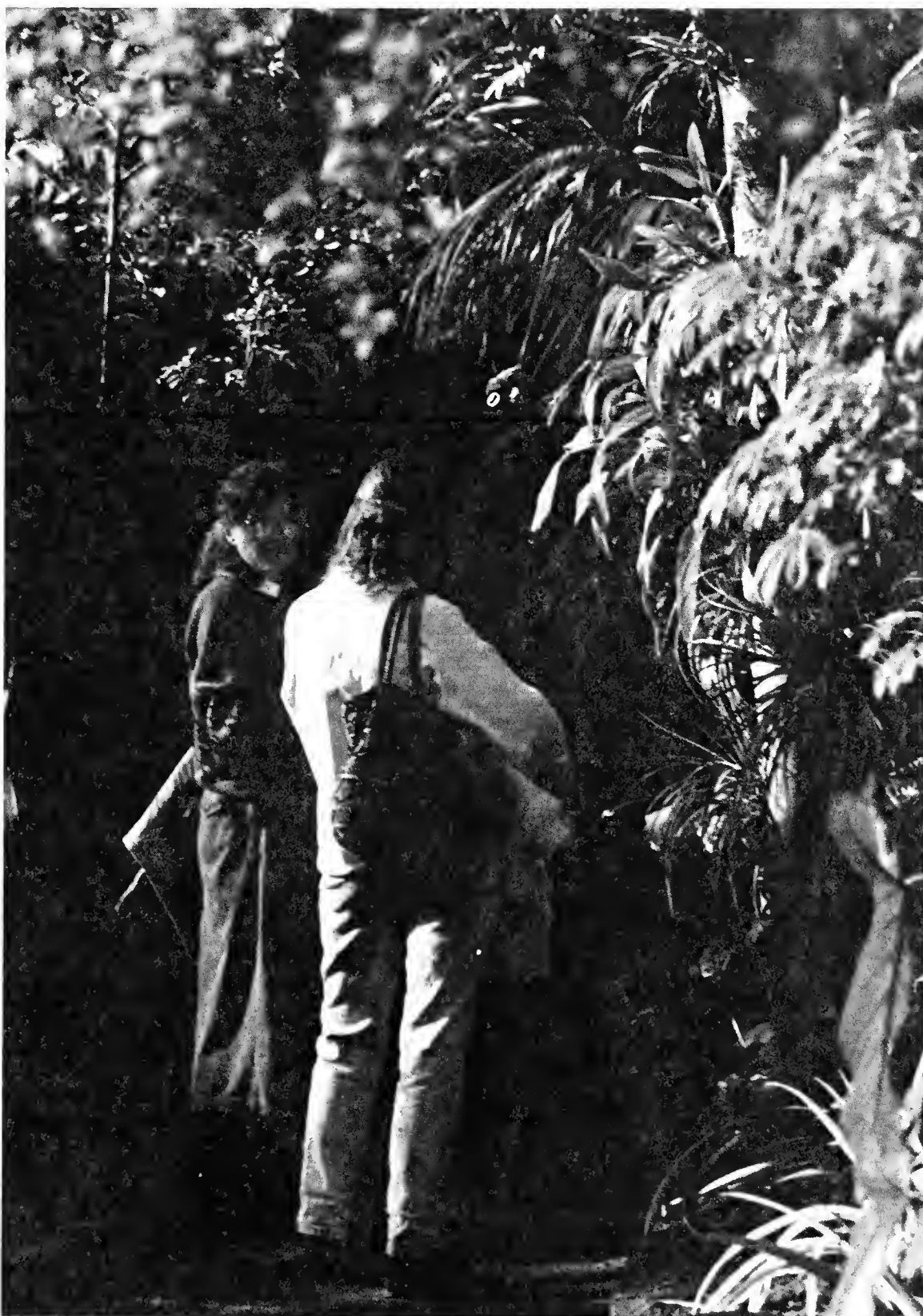
Training begins Tuesday, September 19, for volunteer guides to lead groups of children and adults through the Gardens' conservatory. In 10 sessions new guides will learn about the growth and habitats of popular plants such as the vanilla orchid and the banana tree. Students will also learn important information about the economic values of plants and their communities—and much more.

Classes start at 9:30 a.m. in classroom B. Lectures last an hour and a second hour of each session is spent exploring the "jungle." Time in the conservatory will allow new guides to become well-acquainted with the different plants. You will soon be able to readily identify bromeliads, orchids,

and coffee trees and to share some interesting facts about these plants with your tour groups.

Before you begin to lead groups, new guides will be encouraged to attend tours led by experienced guides. This will help each of you learn a few handy tour techniques. After completing the 10-week training course, you can attend a series of continuing-education courses that meet throughout the year. Guides will soon discover that the volunteer group is very active, meets frequently, and has lots of fun!

The class size is limited and registration is \$25. To register, complete the education department registration form in this newsletter, or call the education department at 331-4000, Ext. 20, for more information.



Guides help visitors understand the plants of the conservatory.

The schoolhouse at Chatfield Arboretum has been brought back to life.



A colorful spectrum of native wildflowers has probably been overlooked by the casual visitor to Chatfield Arboretum. Planted at the south end of the arboretum's nursery, this wildflower seed production area is the second phase of research funded by a three-year, \$100,000 grant from Martin Marietta. Over 18,000 plants were transplanted on the two acres of the deer-proof nursery during the last two weeks of June. *Campanula rotundifolia* (harebell), *Oenothera coronopifolia* (cutleaf evening primrose), *Ratibida columnifera* (coneflower), and *Thermopsis rhombifolia* (golden banner) are among the 50-plus species of native wildflowers being tested.

Gayle Weinstein, Denver Botanic Gardens Director of Plant Collections,

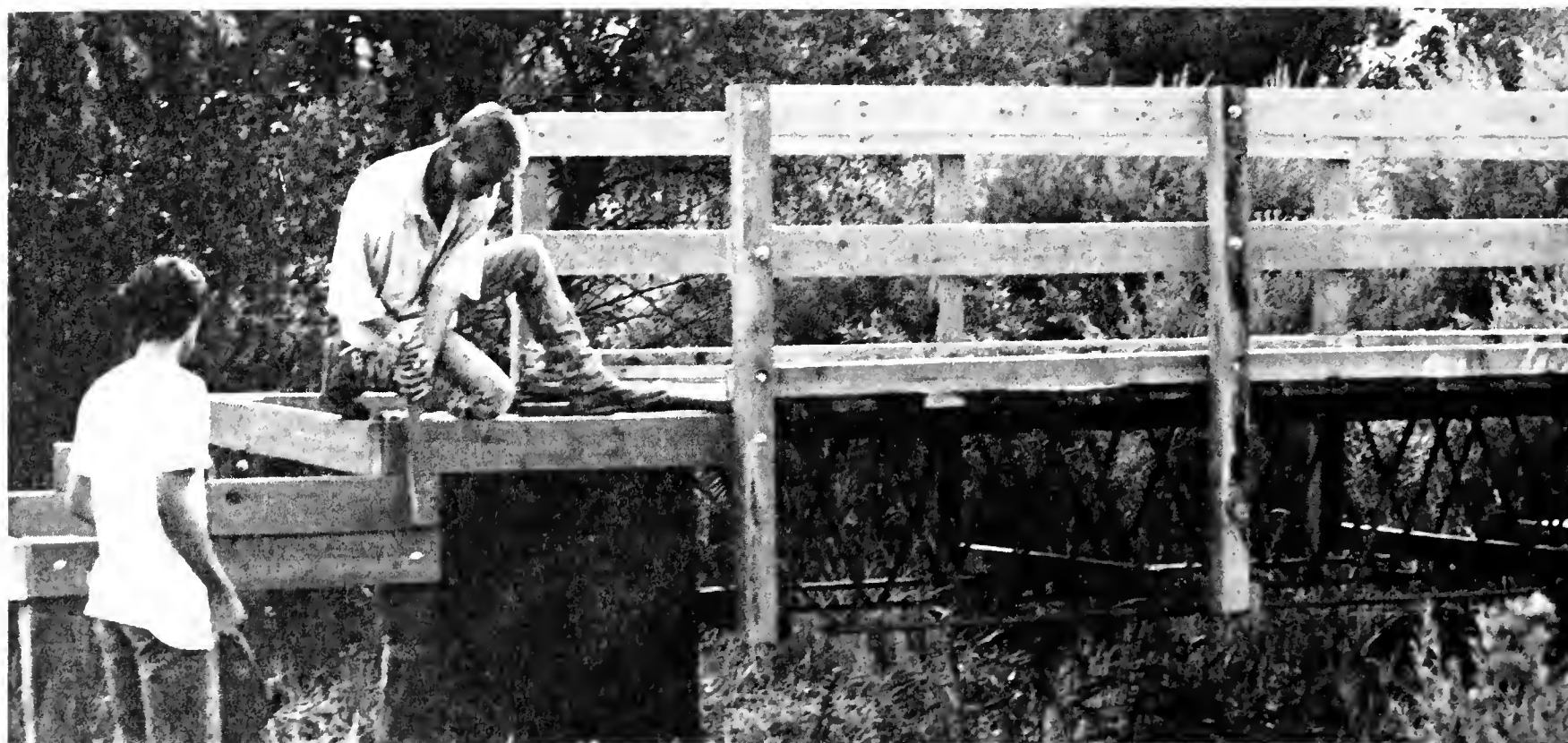
is being assisted in this current phase of research by Greta Flatt, at the arboretum, and Suzanne Aberman, at 909 York Street, where a temporary, 1,360 square-foot greenhouse has been erected for wildflower propagation.

Mrs. Weinstein is enthusiastic that so many scientific disciplines have already been involved. This native wildflower mix will ultimately be of value to the Colorado State Highway Department, state-wide reclamation projects and homeowners by eventually increasing the selections in the marketplace. Both public (Colorado Highway Department and Soil Conservation Service) and private consumers of wildflower seeds have been restricted in their use of wildflower seeds (native or not) by what is cur-

rently available in the marketplace.

What distinguishes this research project from others is that only native midgrass prairie plants are being studied, and that their reproductive attributes are being statistically evaluated.

Denver Botanic Gardens' two-day "Landscaping with Wildflowers and Native Plants" in February 1988 has spawned regional interest in wildflowers. Wyoming, as part of their centennial celebration, will hold a wildflower conference, September 8-9, in Cheyenne. For conference information, call (307) 634-8816.





Pumpkin Festival

As Labor Day weekend rolls to a close, one can visualize the mountains glowing in autumn splendor, leaves needing to be raked and fields full of pumpkins. Yes, Halloween is not far off. To celebrate the occasion Chatfield Arboretum is holding a Pumpkin Festival, Saturday, October 14 (rain date is October 21), from 11 a.m. to 6 p.m.

Over an acre of pumpkins were planted this May, carefully tended by volunteers of all ages. The largest pumpkins will be sold for \$4.00 with prices ranging down to 50 cents for the decorative, diminutive Jack-Be Littles.

This free, family oriented Pumpkin Festival will include many activities such as a tractor-pulled hayride and guided tours developed to appeal to young children. A farmers' market and other concessions will be open in the area of the historic Hildebrand Farm site. Come early for the best selection and bring a picnic to enjoy by the creek.

Nature Center and Riparian Trail Dedications at Chatfield Arboretum

Another dream will be realized at Chatfield Arboretum Thursday, September 14, when the Board of Trustees of Denver Botanic Gardens celebrates the renovation of the Polly Steele

Nature Center and dedicates the newly completed Dora and Pauline Roberts Riparian Trail.

Mary Pauline (Polly) Steele was a long-time volunteer and dedicated supporter of the Gardens; Dora Roberts was her mother. The project was funded by the Mary Pauline Steele estate.

Members are invited to attend the occasion, set for 5 to 7:30 p.m. It will include tours along the trail and refreshments following the ceremony.

The dedication plaque for the trail will read, "Dora and Pauline Roberts Riparian Trail: a memorial in their honor. This trail and foot bridge dedicated to nature lovers of all ages, and is made possible by their generous legacy."

Wyoming Wildflower Conference

A conference for wildflower enthusiasts titled "Wildflowers: A Lasting Legacy" is set for this September 8-9, in Cheyenne, Wyoming.

The planting of wildflowers is being supported as a Wyoming Centennial project, in celebration of the state's 100-year anniversary of entering statehood. Volunteers are planting wildflowers at selected rest areas and along highways throughout the state.

Along with this wildflower planting effort organizers are planning a conference on wildflowers to cover issues

related to highway wildflowers, economics of wildflower planting, maintenance, and the nuts and bolts of establishing wildflowers in large and small areas. The conference will feature experts from Denver Botanic Gardens, the National Wildflower Research Center and the Idaho Highway Department.

"Wildflowers: A Lasting Legacy" will be at the Hitching Post Inn in Cheyenne. For more information write: Wildflowers, P.O. Box 1003, Cheyenne, WY, 82003, or call 307-634-8816.



A field of pumpkins has been grown for the arboretum's Pumpkin Festival.

Wildflowers at Chatfield Arboretum are plentiful.

6 Men's Garden Club Plant and Produce Sale

The first Saturday of the month, September 2, is the date of the annual Men's Garden Club of Denver Plant and Produce Sale. Remembering that a portion of the proceeds will come to the Gardens' education program (or remembering the excellent quality of last year's homegrown produce), members will certainly want to drop by and support this effort.

Hours of the sale are 9 a.m. until 5 p.m. For more information call Paul Groeger, President of the Men's Garden Club of Denver, at 978-9736.

A Day of Discovery: Peppers

Sweet to spicy, peppers will be the featured plants during the September Day of Discovery, Tuesday the 19th.

Free lectures will begin at 10 a.m. Handouts will include a bibliography and unusual recipes.

Call the Gardens at 331-4000, Ext. 24, for more details.

Last Call! Member-Get-A- Member Contest

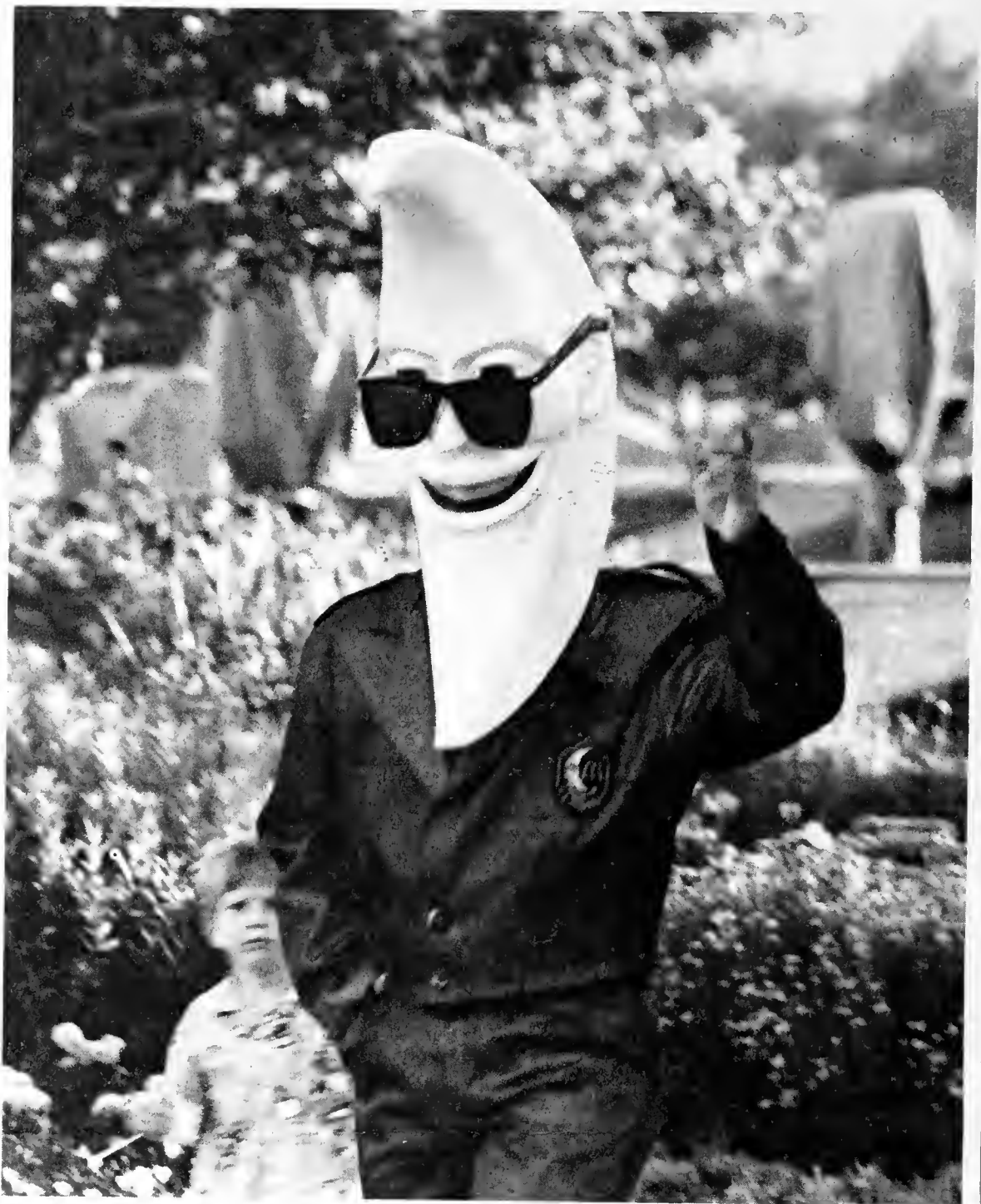
If your friends have delayed becoming members of the Gardens but really intend to do so, be sure their applications are returned and postmarked by September 15.

Include *your* name, address and phone number on the application so YOU will receive the \$2 gift shop coupon as described in the contest brochure. With at least five new members to your credit you will be eligible for the great prizes listed earlier. Remember that the grand prize includes six tickets to one 1990 summer concert and a \$50 gift certificate good in the gift shop.

Contest brochures are available at the information desk in the lobby or you can design your own application. This should include each new member's name, address, phone number and membership level along with your name, address and phone number. Valid checks, or VISA and MASTERCARD number (with expiration date) must accompany the applications.

This is the last call! Get busy today and don't miss out on this opportunity to introduce friends to the Gardens and to receive these prizes.

Some summer evening visitors met Mac Tonight at the Gardens.



Get Your Membership Dividend Plant September 9

Members may pick up their free indoor or outdoor plant selection Saturday, September 9, from 9 a.m. until 4 p.m. This annual offering will be available in the patio area outside the gift shop.

This year the indoor selection includes variegated flowering maples, small-leaved rubber plant, a Dallas fern, copperleaf, trailing guppy and holly.

Hardy outside plants include several native plants: poppy mallow, monarda (oswego tea), solidago, (goldenrod) and a dwarf form of mimulus (for a wet corner of the garden). The small upright shrub viburnum and the evergreen shrub erica (heather) will be given away this year as will the buckeye tree and a form of red-berried Russian olive. Rock gardeners will be delighted by the *Dianthus simulans*. The popular Chrysanthemum rubellum cv. Clara Curtis will be given again this year.

Members will be asked to complete a questionnaire to help evaluate this event.

Members' Plant Dividend—1989

This coupon entitles you to one free plant per membership. Please complete it before making your selection, cut it out and exchange it for your plant on September 9.

Name _____

Member ID _____
(on top line of newsletter address label)

Address _____

City _____ ZIP code _____

Horticulture in Bird World

In April of 1975 Bird World at the Denver Zoo had its grand opening. At that time it was one of the few indoor natural habitat aviaries in the country. An indoor natural habitat exhibit was then somewhat experimental. The concept of keeping animals in heavily planted, natural habitats is very appealing. Zoos all over the world have been working toward this goal for many years.

Keeping a healthy plant collection can be very tricky. You are working with small areas that are often many times more densely populated with birds than in the wild, so it is very important that there is an abundance of growing, healthy plants. As there will always be damage to the plants from the animals, the plants have to grow fast enough to offset this.

After Bird World was open for about five years, most of the trees had reached the tops of the exhibits. We started having trouble keeping the lower plants growing and many died due to insufficient light.

When Bird World opened, there were 50 species of plants growing in the Rain Forest exhibit; by 1982 the number was down to about 30. The only ones doing really well were the large trees. Bruce Kane, Senior Keeper of Bird World, made contact with Denver Botanic Gardens (DBG) and found that they were very willing to work with us. Almost immediately DBG started working on a plan to propagate plants that they thought might work. These were mostly hardy plants with tough leaves. It was thought that these types of plants would have a better chance of withstanding the damage from the birds. On three separate occasions that year DBG brought us substantial amounts of plants; after each planting most of the plants died within three months. The cause was still thought to be the damage from the birds. However,

Beverly Nilsen, a horticulturist from DBG, suggested that we have some soil samples taken, and we discovered that all the nutrient levels were extremely high, due to the buildup of animal excrement over the years. The only solution was to replace the existing soil with a substantial amount of commercial potting soil and to start digging. Although there was noticeable improvement, the plants still did not seem to do as well as they should. Then we started looking up at the skylights. When the building was built, white plastic panels were installed four inches from the outer glass. Their purpose was to conserve energy, to diffuse light and to prevent new plants from burning in the hot sun. When inspecting them in 1985, we found that they were blocking much more light than they were originally designed to as a result of deterioration. That condition along with a mature canopy from the tall trees and bamboo meant that insufficient light was reaching lower plants. We started the long, hard and dangerous job of taking the plastic panels out. Three winters have been required to get them all, a job I am very glad is over.

From the first year, we knew we were on the right track. The plants responded favorably and the birds also appreciated the added sunlight. You can often see them sunning themselves with wings stretched out for long periods of time. Also their colors look much more brilliant.

I would like to take this opportunity to thank the staff of Denver Botanic Gardens especially Beverly Nilsen, Karen Trout and Larry Latta for sharing their expertise and their plants with us. Without them Bird World would not look as good as it does today.

Archie Paulson
Zookeeper

Excerpted from *Zoo Review*, May 1989, with permission from Clayton Freiheit, Director of the Denver Zoo.

"Iris in the Garden and in the Wild: A Current View"

Set aside Sunday evening, October 1, for an encounter with British botany, horticulture and eloquence at their best. Through the efforts of the Colorado Chapter of the American Rock Garden Society, Brian Mathew, the world's foremost authority on iris, will present "Iris in the Garden and in the Wild: A Current View."

The chief scientific officer in the herbarium of the Royal Botanical Garden at Kew, Mr. Mathew has botanized extensively in Asian Turkey, Iran, Soviet Central Asia and the Balkan peninsula—homelands to many species of iris and other petaloid monocots ("bulbs"). He's the author of 13 books and over 200 papers on botanical and horticultural subjects. However, perhaps more felicitous for our entertainment and education, is Mr. Mathew's facility as a speaker. He's as renowned for his relaxed wit and perceptive observations as for his plant wisdom.

Mr. Mathew's overview of the genus *Iris* will be welcomed by both gardeners and botanists. Colorado's high, continental climate and alkaline soils are similar to many Asian habitats of iris and are, therefore, well suited to their cultivation.

Denver Botanic Gardens' Rock Alpine Garden has become the showcase of many iris species that were formerly unfamiliar to Colorado growers. As they have been introduced here they've caught the attention of iris growers in the region, and recently there has arisen a great interest in the rarer members of this lovely group of plants as gardeners are discovering the interesting floral patterns and colors that lie outside the traditional pallet of tall bearded iris. In fact, several of these rarer species are becoming more frequently used in the efforts of local hybridizers in their quest for ever more exotic blossoms.

"Iris in the Garden and in the Wild: A Current View" will surely whet your appetites for unusual plants, as it satisfies your appetites for entertaining monologue. The lecture will be at 7 p.m. Tickets (\$4.00 for members of Denver Botanic Gardens and the American Rock Garden Society, \$7.00 for nonmembers) may be reserved through the Gardens' education department, 331-4000, Ext. 20. Since a sellout is expected, members of the Gardens are urged to order theirs early.



"Iris in the Garden and in the Wild" on October 1

Summer
1989
Denver Botanic Gardens

CLASSES



Expanding Your Houseplant Horizons Epiphytes and Near-Epiphytes

(three sessions)

Saturday, October 7, 14, 21
8 to 11 a.m. Classroom A

Those fascinating tropical plants that grow above the ground, perched in trees or on mossy outcroppings or rocks, present special challenges to houseplant gardeners. They have acquired the reputation of being difficult. You'll find that they're merely different.

During the three sessions the lectures will introduce you to the special habitats and cultural requirements of begonias, gesneriads, ferns (including staghorns), orchids, bromeliads, aroids, (including anthuriums) and forest succulents (such as hoyas and epiphyllum cacti). And, as a result of the hands-on demonstrations in pot-

ting and propagation, you will add some of these interesting plants to your collections.

Instructor: Larry Latta is botanist-horticulturist for public information at the Gardens. He has been an orchid hobbyist for over 15 years and a popular DBG instructor.

Fee: \$48 members/\$53 non-members (includes \$14 for materials)

Limit: 16

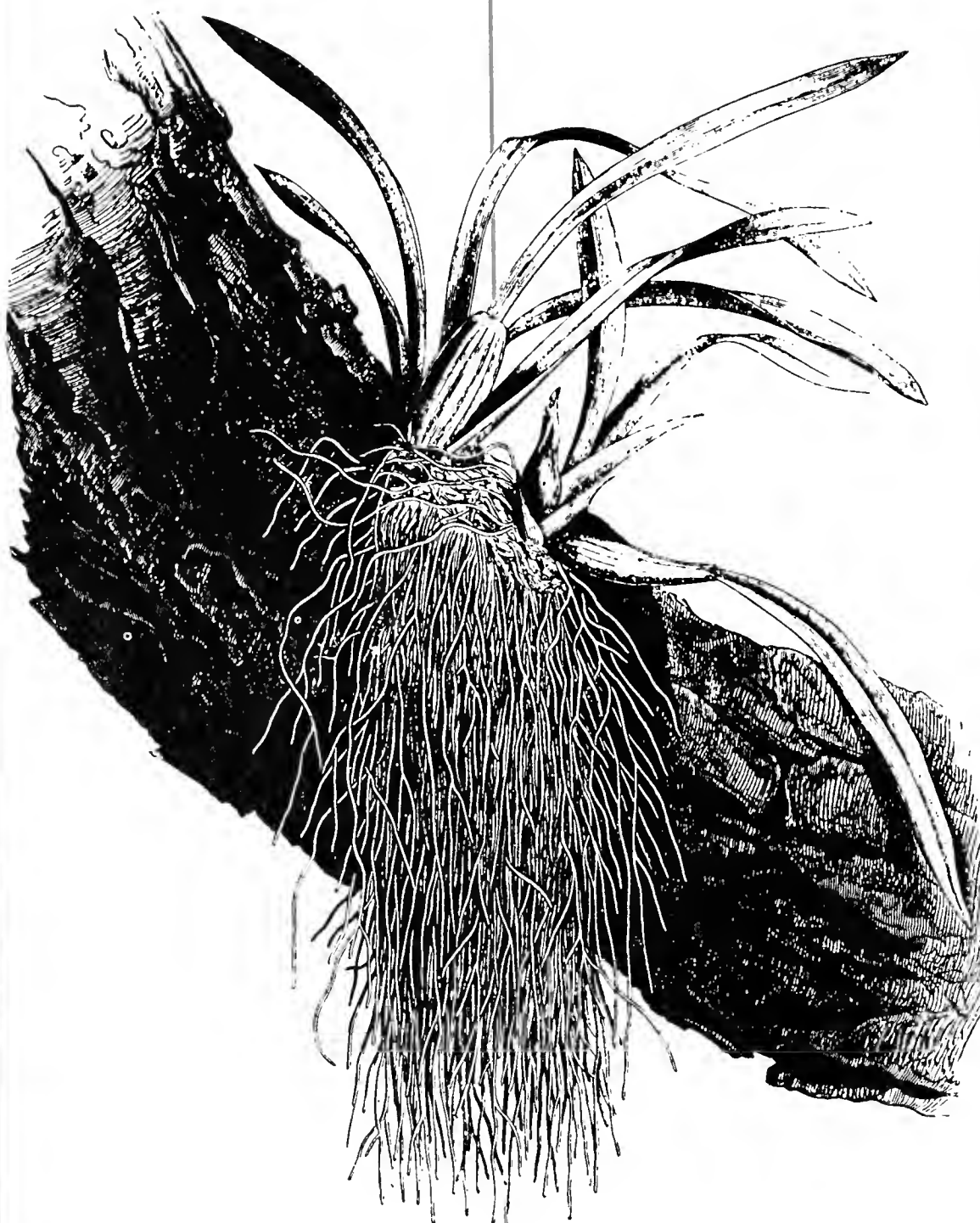
Winter Border Preparation

(one session)

Tuesday, October 3
5:30 to 7:00 p.m. Classroom C

Winter will soon be upon us and the big question gardeners are facing is "are your perennials ready for the fluctuations of Colorado's climate?" Do you know what to do in the border to help your plants survive?

Learn tips practiced by the experts and glean ideas from an experienced, popular perennial gardener.



If the weather allows, students may gain some tips from observing practices in the Gardens' perennial border. This session is a perfect follow-up for previous "Perennial Pleasures" classes held this year. Students are welcome to bring a snack to this meeting.

Instructor: Andrew Pierce is a horticulturist and is Assistant Director of DBG. He is an accomplished grower of perennials and alpine plants and his garden was recently featured in *Fine Gardening*.

Fee: \$5 members/\$5.50 nonmembers

Limit: 18

Golden Aspens and Their Natural History

(one session)

Thursday, September 14
6:30 to 8:30 p.m.
Morrison Center at Denver Botanic Gardens

Do you know that aspens are one of the most widely distributed trees in the lower 48 states?

By viewing slides participants will learn about the plants and animals associated with Colorado's aspens. In addition to learning about the general natural history of aspens, students will learn why some aspens reproduce by seed and why others reproduce by suckers and you'll find out why one aspen grove can be a totally different color from neighboring aspen groves during the fall.

Instructor: Tina Jones is a popular field trip leader and naturalist and has studied alpine ecosystems at the University of Colorado, Boulder, Research Station outside of Ward.

Fee: \$8 members/\$9 nonmembers

Native Colorado Conifers and Their Natural History

(two sessions)

Sundays, October 15, 22
2 to 4 p.m.
Morrison Center at DBG

Can you distinguish a one-seeded juniper from a pinyon pine? Learn how to correctly identify Colorado's native junipers, pines, spruces and firs from characteristics such as cones, needles and bark.

Look at cross sections and fresh branches and discuss annual rings. Specific plants, animals, climate and soils associated with our evergreens will all be covered.

Bring note-taking materials and a hand-lens, if you have one.

Instructor: Tina Jones

Fee: \$20 members/\$22 nonmembers

Autumn Conifer Walk

(one session)

Friday, October 27
8 to 9:30 a.m.

In Colorado conifers are the glory of the winter garden, and since winter occupies a rather large space on the garden calendar, it behooves us to look beyond blue spruce and junipers, junipers and junipers to the tremendous range of miniature and small conifers that have become widely available in recent years.

Come take an autumn walk through the Rock Alpine Garden with its curator and see the delightful picture that can be painted with dwarf conifers, autumn foliage and the last flowers of the season. A list of conifers in this garden, with their ages, will be provided. Sources—local and mail order—will also be given.

Meet: promptly in Rock Alpine Garden.

Instructor: Panayoti Kelaidis is curator of our award-winning Rock Alpine Garden as well as an enthusiastic teacher who enjoys sharing discoveries gleaned from his eight years at Denver Botanic Gardens.

Fee: \$5 members/\$5.50 nonmembers

Limit: 20

The Natural History of Elk

(two sessions)

Sunday, October 8
2 to 4 p.m. at the Morrison Center at DBG and
Monday, October 9
4:30 to 6:30 p.m.
(field trip)

As the night temperatures begin to drop in the fall, the mountains of Colorado echo with the courtship of bugling elk. The call sounds somewhat like a melodious flute. Elk behavior and courtship, plant foods ingested and territory and habitats of elk in the United States will all be covered in this two-session class.

In addition to learning about the natural history of elk, participants in the second class will carpool to the foothills to hopefully hear the elk bugle. Although we hope to hear this sound, there are never any guarantees. Participants are encouraged to bring a picnic supper for the evening outing.

Instructor: Tina Jones, popular field trip leader and naturalist, studied alpine ecosystems at the University of Colorado, Boulder, Research Center outside of Ward, Colorado.

Fee: \$16 members/\$17.50 nonmembers

Limit: 20

Photographing Mountain Wildflowers: Hints for Artistic Achievement

(one session)

Thursday, October 12
7:00 to 9:00 p.m. **Classroom C**

Explore both sides of the photographic spectrum—the mechanics and the sheer artistry. Without this combination a photograph is only a simple photo.

This slide presentation will present photographic equipment such as cameras, lenses, tripods and gadgets that can be used to advantage when photographing wildflowers. Learn how to improve both your mechanical and artistic skills for sharp, well-composed pictures. Hints collected in this class will lead to creating artistically pleasing photographs that you will proudly share.

Plan your schedule to allow for a highly motivated weekend in the Colorado mountains photographing the fall colors. After this two-hour program, you will find yourself packing for a weekend trip on your own to exercise your new knowledge.

This slide program was enthusiastically received at the recent Garden Writers Association of America Rocky Mountain Conference hosted by the Gardens.

Instructor: Robert Heapes is a popular field trip leader who has hiked thousands of miles throughout Colorado. A distinguished speaker, he has lectured throughout the United States and delivered the 1985 Carl Tempel Wildflower Lecture at the Gardens. His photographic works have been published in *Colorado Homes and Lifestyles*; *Pacific Horticulture*; *Horticulture*; and *Flower and Garden*.

Fees: \$6 members/\$7 nonmembers



Beginning Bonsai

(four sessions)

Wednesdays, October 5, 12, 19, 26
7:30 to 9:30 p.m. **Classroom B**

This popular introductory course will cover the history and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of bonsai will be included.

Each student will take a completed bonsai home and all materials will be provided.

Instructors: Keith Jeppson, past president of the Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 17 years. Harold Sasaki is a commercial bonsai grower with 18 years of experience. Both are lively, capable and popular teachers with much experience.

Fee: \$54 members/\$59 nonmembers (includes \$22 for materials)

Limit: 16

Beginning Botanical Illustration

(six sessions)

Tuesdays, September 12, 19, 26,
October 3, 10, 17
Classroom B* 9:30 to 11:30 a.m.
(The first class will meet in classroom A)

This introductory course will stress accurate drawing of flowers, roots, stems and leaves. Fresh plant material will be used for each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first class.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$54 members/\$59 nonmembers (includes \$6 for materials)

Limit: 15

Watercolor Painting

(five sessions)

Wednesday, September 13, 20, 27,
October 4, 11

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Morrison Center at Denver Botanic Gardens

continued on page 10

Facing page:
Learn about the hidden wonders of epiphytes in Larry Latta's class at the Gardens.

This page:
The first step to completing this is a "Beginning Bonsai" class.

continued from page 9

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: one-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane

Fee: \$60 members/\$66 nonmembers

Limit: 12

Botanical Illustration

(five sessions)

Tuesdays, October 24, 31

November 7, 14, 21

9:30 to 11:30 a.m.

Classroom B

This course is designed for beginning and continuing students. It will stress accurate drawing of flowers, roots, stems and leaves (especially fall foliage and berries). Fresh plant material will be used in each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first class.

Instructor: Angela Overy

Fee: \$50 members/\$55 nonmembers (includes \$6 for materials)

Limit: 20

Pine Needle Ornament Workshop

(one session)

Saturday, October 21

9 a.m. to 3:30 p.m.

Morrison Center at DBG

Experience the delightful craft of making delicate lacelike pine needle



ornaments to adorn your holiday tree or your home for months to come. Each student will be provided with a number of stitch patterns and basic instructions to proceed. They will then develop their own unique ornament, stitching with raffia to coil pine needle bundles around a wide selection of wire shapes.

Later, students can further embellish their ornaments with feathers, pine cone "petals" or miniature pine cones. Don't forget your scissors and a sack lunch and beverage; all other supplies will be provided.

Instructor: Debbie McClelland studied art education at Eastern Michigan University and has conducted many classes and demonstrations that showcase her expertise in this revived Civil War art.

Fee: \$27.50 members/\$30 nonmembers (includes \$3 for materials)

Limit: 10

Beginning Wheat Weaving

(three sessions)

Wednesdays, October 25,

November 1, 8

7 to 9 p.m.

Classroom B

Wheat weaving, also known as corn

dolly plaiting or straw decoration working, is a centuries-old craft that was practiced in almost all of the grain-producing countries. In this series of workshops students will learn how to clean and work with wheat.

Various wheat weaving techniques will be taught to complete harvest wreaths, mordifords, Welsh fans and other unique decorations.

Please bring a ruler and scissors to class.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$30 members/\$33 nonmembers (includes a \$6 materials fee)

Limit: 12

Christmas Ornaments from Straw and Wheat

(one session)

10 a.m. to 3:30 p.m.

Morrison Center at DBG

Section I: Saturday, October 28

Section II: Saturday November 4

Please indicate your section on the registration form.

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each year for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan

Fee: \$25.50 members/\$28 nonmembers (includes a \$5.50 materials fee)

Limit: 12

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ ZIP _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Gardening: Fall Planting

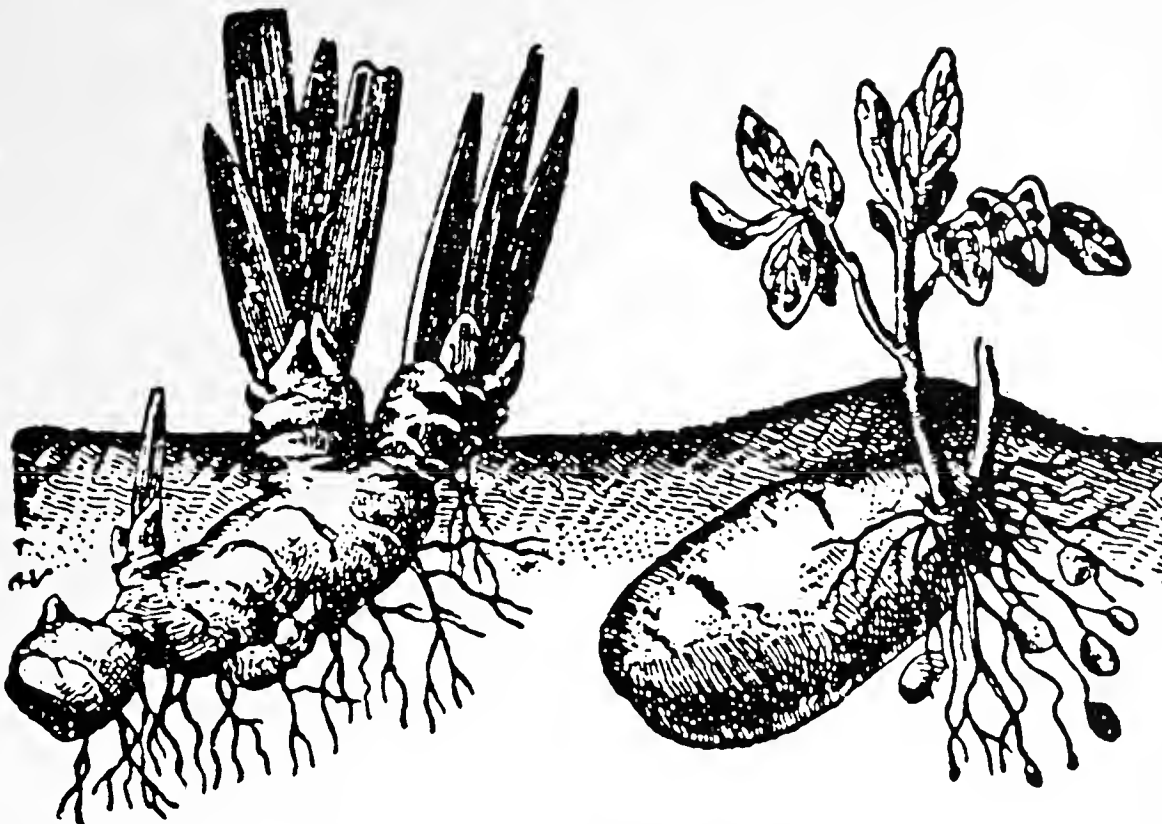
September is a season of change in the garden and with autumn dews covering the plants early in the morning it is a sign that the summer heat has departed. Individual days may still be hot but the morning coolness affects most of the garden.

Fall splendor at this time in the perennial border is often found among the late-blooming daisies and even the tinted foliage of peony and bergenia. If the earlier flowering perennials are looking the worse for wear they can be cut down to three inches or so. If the material is clear of fungus (powdery mildew) and pests (red spider mites), it can be incorporated into your compost heap. Should you have a chipper, put them through to reduce them into smaller sizes. Most of this activity takes place late in the month or early October depending on the first frost date. Last year was an exceptional fall with little heavy frost until November.

In all phases of gardening there are exceptions to the rule and one of these is transplanting peonies. It should never be done in the spring! Late September and early October is the ideal time. Water the plant the day before you intend to move it. Lift the plant with a good amount of soil by digging deeply around it prior to moving it to its new location. Be sure that the bud eyes are at the same level as they were before transplanting. They should be at ground level. If the plant is inserted deeper than this it will then produce leaf growth but not flowers. Should you wish to divide a peony at this time carefully remove some of the soil to see the root structure. You will notice that they are heavy and thick. Division should only be made in a few pieces and not to individual bud eyes. Transplant these divisions carefully back into their new site or cover with a moist wrapping if they are going to another location.

Perhaps the most exciting happening in September is the arrival of the bulbs, principally from Holland, into the stores, garden centers and through mail-order houses. As soon as they are obtained, check to see that they are healthy and then store them in a cool location until you have time to plant. They may be labelled "pre-cooled" and this means they have undergone a six-week period of chilling (at 38-40 degrees) to enhance bud initiation in the bulb. This is most commonly found in tulips and hyacinths.

As soon as the soil temperature starts to drop in the middle of the month it is time to start planting bulbs. The ground should be prepared to a depth of 10 inches or so for larger bulbs. Treat it as though it were your vegetable patch. See that it is rela-



tively moist. The bed is easier to dig in this condition. Then decide your final layout for your planting.

The most frequently asked question is "How deep?" A rough rule of thumb (remember that there are always exceptions) is four times the depth of the bulb. A large daffodil with a two-inch bulb should be eight inches deep and a crocus 1/2-inch deep should be inserted to two inches. Look around for some of the minor bulbs such as dwarf iris (did you think all iris were tall bearded?), snowdrops, winter aconites and squills to flower in the partially shade areas and windflowers, smoky headed grape hyacinths and smaller tulip species are naturals for the sunnier sites. You may find it difficult to tell which way up is up on anemones. Don't worry, just plant them on their

sides and nature will sort it out for you.

See that your bulbs remain fairly damp during the fall and early winter so that they maintain sufficient moisture for their major root growth prior to the soil becoming frozen. Dry open areas in the winter, especially over tulips, should be watered if the soil is unfrozen. Our worst tulip seasons, it seems, are when the ground is frozen for extended periods and the roots fail to take up adequate moisture.

September may be a time of less activity in the garden, but this month requires some efforts to "winterize" your valuable garden. Don't hesitate: It may be a cold winter.

Andrew Pierce is Assistant Director of Denver Botanic Gardens



CALENDARS

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

*First meeting of a class with more than one session

3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Coming Next Month

October 1 Brian Mathew's lecture on iris	October 5 Beginning Bonsai*	October 8 The Natural History of Elk*	October 14 Pumpkin Festival, African Violet Sale	October 21 Pine Needle Ornament Workshop*	October 25 Beginning Wheat Weaving*	October 28 Christmas Ornaments from Straw and Wheat, Day of Discovery
October 3 Winter Border Preparation	October 7 Expanding Your Houseplant Horizons*	October 10 Bonfils-Stanton Lecture	October 15 Native Colorado Conifers and Their Natural History	October 24 Botanical Illustration*	October 27 Autumn Conifer Walk	
		October 12 Photographing Mountain Wildflowers*				

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

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NEWS

**Denver Botanic Gardens
October 1989
Number 89-10**

Tempel Wildflower Lecture November 1

Dr. Boyce A. Drummond, an ecologist who has studied natural communities for over 20 years and who has published his observations widely in both professional and lay journals, will give this year's Carl Tempel Wildflower Lecture. It's titled "Insects and Flowers: The Biology of a Partnership."

The wonderful range of color and

shape exhibited by flowers is due primarily to their long, intimate association with animal pollinators, particularly insects. Likewise, the astonishing diversity of insects results largely from their complex relationships with plants. Dr. Drummond's slide lecture will explore the remarkable ecology of some of these intriguing partnerships, from wind-swept alpine tundras to steaming rain forests.

Over millions of years, as plants and their pollinators have coevolved,
continued on page 11

Explore South Africa's Beauty and Beasts on October 19

In a cosponsored effort Denver Botanic Gardens and the Denver Zoological Gardens welcome internationally renowned wildlife and wilderness photographer Trevor Barrett to John C. Mitchell II Hall, on Thursday, October 19, at 7:30 p.m.

Mr. Barrett takes you on a journey to Africa "a continent of exquisite beauty, of tangled forests, mountains and grasslands; of magnificent wild animals and brilliantly colored birds; of insects and aloes and delicate wildflowers."

His multi-image slide presentations create the feel of an actual wilderness experience, with the purpose of promoting environmental awareness and a deeper understanding of nature.

Come on a safari to Ndumu, a South African wildlife reserve, with every wild thing from antelope to zebra. Bring your whole tribe to explore the native flora of South Africa in "Patterns of Nature."

Admission for members of either the Gardens or the Denver Zoo is \$4.00 for adults and \$2.00 for children 6 to 12. The general public is also welcome at a cost of \$5.00 for adults and \$3.00 for children. DBG members should use the registration form within this newsletter to reserve a seat for the safari.

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Meeting
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*Photo by Trevor
Barrett*

Assistance will be provided for shoppers at Botanical Treasures IV.



Botanical Treasures Returns to Denver Botanic Gardens

Turner Art Gallery and Howard Lorton Galleries have joined to sponsor Botanical Treasures IV, a botanical print show and sale to benefit the Gardens, Friday through Sunday, November 3, 4 and 5 from 9 a.m. to 5 p.m. daily. This year the event returns to the Gardens' John C. Mitchell II Hall at 1005 York Street.

Howard Lorton Galleries is a new cosponsor for this show. Their participation brings a different dimension, the use of botanical prints and floral materials in interior design. The focal point of this year's show will be their model room. They will also have representatives available to discuss and demonstrate the use of fine floral wallpaper and fabrics, furniture and botanical prints.

Turner Art Gallery, Colorado's oldest art gallery and a leading source of botanical illustrations, will once again present the botanical print display. It will offer not only an extensive selection of botanical illustrations but a variety of natural history prints including birds, butterflies and other wildlife. Turner Art Gallery will have staff on hand to answer questions and assist you with your purchases.

On Saturday, November 4, you can take a guided tour and discover the Garden's library and rare book room, watch modern illustrators at work or receive decorating tips from an interior designer.

Sunday, November 5, you can enjoy a one-hour video presentation of botanist Joseph Banks' and Captain Cook's trip around the world. The illustrators and interior designers will once again be available for you to talk with and watch.

The New American Style of Garden Design

James van Sweden, the final speaker in this years Bonfils-Stanton Lecture Series, is coming to John C. Mitchell II Hall Tuesday, November 14, at 7 p.m.

Mr. van Sweden, founder of the Washington landscape firm of Oehme, van Sweden and Associates, Inc., is a "wonderful designer of landscapes and a fabulous promoter who could sell snow to Eskimos" according to the firm's project manager and landscape architect.

As his lectures are both stimulating and dynamic, so too are the gardens he designs. He promotes year-round beauty and diversity using small early-blooming trees, spring bulbs whose foliage is quickly covered by masses of showy perennials and giant grasses, whose plumes and seed pods decorate even snow-covered landscapes.

Tickets for the October and November Bonfils-Stanton lectures have sold out.

Tributes

In memory of Lucille Foster DeWitt

Mr. & Mrs. John A. Atkinson
Cynthia N. Sawyer

In memory of Trudi Leopold

Mr. & Mrs. Robert S. Appel

In memory of Mrs. Libman

Mr. & Mrs. Robert S. Appel

In memory of Mrs. Angie Mann

Dorothy Ann & Paul Fullerton

In memory of Donald Pettis Robertson

Mary Belle Grant

Mr. & Mrs. Frederic M. Pannebaker

In memory of Francis P. Sargeant

The Garden Club of Denver

Mr. & Mrs. William V. Hodges, Jr.

In memory of David Shields

Michael & Diane Arave

In memory of Christine Tramutt

Herbert & Bea Jones

Contemporary Interpretations of the Botanic Gardens

September 28 to November 11 Trammell Crow Company, Property Management Division, will sponsor "Contemporary Interpretations of the Botanic Gardens," a unique art exhibit based upon 14 Denver artists' personal vision of Denver Botanic Gardens. Their interpretations will be expressed in a variety of media: ceramic, sculpture, oil and watercolor.

The show is produced by Arts Liaison, consultants and curators for fine art exhibits and public space art programs for corporations, non-profit organizations and government agencies. Their aim is to present artwork to its best advantage, working closely with representatives of each open space to ensure that the exhibit compliments and enhances the physical environment.

"Contemporary Interpretations of the Botanic Gardens" will be mounted in the first floor lobby of One Tabor Center, 1200 Seventeenth Street in downtown Denver. Several prominent Denver-area artists will be represented by their works created this summer either on site at the Gardens or from preliminary sketches or photographs of the Gardens.

For more information call Andra Archer, 733-1868, or Todd Misk, 832-1543.



Green Thumb News

Number 89-10 October 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than September 20 for November, October 20 for December and November 20 for January.

Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Holiday Sale Is Near

November 17 and 18 are the dates of the 1989 Denver Botanic Gardens Holiday Sale. Plan now to attend and participate in one of the best holiday fund raisers in town.

Buyers for the gift shop have assembled a large selection of beautiful and unusual gifts. In addition to linens, china, flower vases, baskets and decorative pottery, look for the charming cloth maché figures (called "cloth-tique" by the maker). Featured will be "Father Christmas" in various disguises, old-fashioned carollers, angels and rabbits and other small animals.

As always, a large selection of botanical books will be available on topics ranging from herbs to container gardens to wildflowers. Beautifully illustrated and entertaining, as well as informative, garden books make wonderful, wintertime gifts.

The Denver Botanic Gardens Guild

teers. Look for wreaths, tree ornaments and decorative items, as well as fragrant potpourri that has been placed in sachets, tooth-fairy pillows or in jars. It is also available in bulk.

Finally, the volunteers of Chatfield Arboretum will again be selling their popular hand-gathered honey. Aromatic, amber-colored and subtly flavored by the wildflowers and native plants from which the bees gather nectar, this treat is not to be missed. Last year, the honey sold out by Saturday morning, so come early to be sure you get some.

The Holiday Sale is organized and operated by Denver Botanic Gardens volunteers. All proceeds benefit your Gardens. Upon presentation of a membership card, all members will receive a 10 percent discount on purchases of at least \$10.00.



Day of Discovery: The Complete Pumpkin

Something different is in store for our October "Day of Discovery." Saturday, October 28, you'll discover "The Complete Pumpkin."

We're asking you, our members, and others who may be inclined toward turning pumpkins into works of fantasy, to help build a giant display of autumn vegetable sculptures. Get out your paring knife (but be careful), magic markers (probably the safest medium for youngsters), or your special pumpkin carving tools or whatever else your creative spirit calls for, and decorate a pumpkin for the Gardens. Then bring it to John C. Mitchell II Hall Saturday morning between 9 a.m. and noon to add it to our display.

Your contribution may win you a prize and the public recognition you could have never dreamed of. Twenty-five of the entries that catch our judges' eyes are destined for display downtown, in a prominent location still to be decided, after their weekend debut at the Gardens.

Whether you're into fun, fantasy or fine art, join us in liberating the hidden beauty that lies in each plump, orange cucurbit, as we celebrate "The Complete Pumpkin." Your creation may be chosen for stardom in the Gardens' pumpkin patch downtown. In any case, it will help brighten the non-pumpkin faces of late October visitors to the Gardens.

Need inspiration? Register for the Carve-O-Lantern Party in the education section of this newsletter.

Call the Gardens, 331-4000, Ext. 24, for more details.



Volunteers make shopping easier at the Holiday Sale.

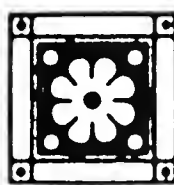
has again brewed fragrant herbal vinegars and assembled herb and spice mixes for use in cooking. Look for your favorite blends; watch for some new blends this year.

The Guild also cut flowers and other plant materials at their peak, dried and either arranged them in bouquets to use as they are or to insert in other arrangements. Single items will also be available. These lovely combinations are reasonably priced, and much of the plant material is unique. A lot of the flowers were seen growing at the Gardens this summer—remember the display by the gift shop?

The sale will also feature numerous hand-crafted items made by volun-

DBG Community Gardeners Donate Produce

DBG community gardeners, in a coordinated effort, have been donating their extra garden bounty to a local Capitol Hill emergency assistance center at 9th and Emerson every Wednesday morning. Thanks go to all who have generously contributed.



4 Chatfield Highlights

A Pumpkin Festival scheduled for Saturday, October 14, from 11:00 a.m. to 6:00 p.m., will be held at Chatfield Arboretum. Admission and parking at the festival are free. Donations (from \$.50 to \$4.00) will be asked for each pumpkin selected. Come and pick your own pumpkin, bring your whole family (no pets please) and have a festive day at Chatfield Arboretum.

Many events have been planned for this family oriented festival. Kids of all ages are guaranteed to enjoy the pumpkin-painting contest. Prizes, sponsored by local businesses, will be awarded for different categories in the pumpkin painting. Whether you are 5-years old or 75-years young, events have been arranged for your enjoyment. A puppet show is scheduled throughout the day. Food concessions and picnic area will be available.

Nature programs are scheduled. Learn about the plants and wildlife surrounding the arboretum. "Snakes Alive" is always a big attraction as it contributes to a better understanding of the wildlife community at the arboretum. Plant material for your dried flower arrangements—Indian corn, squash, fruits and nuts—will be on display and sold. Experts plan to attend the festival to answer your questions about gardening, canning or cooking. After you have picked your pumpkins, you may wish to hike along our new trails or relax on our tractor-pulled hayride. Call 973-3705 for further information.

Volunteers are needed for Blossoms of Lights events.

Blossoms of Lights Volunteers

The Gardens will abound with activity in December when we will once again celebrate the holidays with the High Teas, Teddy Bear Teas, a quilt show and music during Blossoms of Light. The theme this year is "A World of Trains."

Behind all the glitter and excitement of this month-long celebration are the efforts of many dedicated volunteers. Patty Barnard, Blossoms of Light chairman, is now seeking assistance in

pulling it all together. Volunteers are needed to arrange tickets, teas, hostesses, entertainment and publicity.

Without volunteers such events as Blossoms of Light could never happen, so get in the holiday spirit early this year, join the forces preparing the celebration and be a part of this winter activity at the Gardens. Your participation can help make "Blossoms" a huge holiday success.

For more information on how you can help, please call Patty Barnard at 771-4777 or Linda Brancato at 331-4000, Ext. 25.



The DGB Travel Committee Needs Your Input!

To help develop a tour program that meets your expectations, we need your response to the following. Which of these would you prefer?

Length of trips 5 to 7 days _____ 8 to 14 days _____ 15 to 21 days _____
Number of trips One domestic and one foreign trip annually _____ more _____ less _____
Size of tour group 15 _____ 25 _____ 40 _____ other _____
Price budget _____ moderate _____ luxury _____
Time of year spring _____ summer _____ fall _____ winter _____
Destinations foreign _____ domestic _____

Other suggestions or comments _____

If you wish to be placed on a mailing list for future tours, include your name and address:

Name _____

Address _____

City _____ **State** _____ **ZIP code** _____

Thank you. Your response will serve as a guideline for future Denver Botanic Gardens tours'. Please mail to:

Travel Committee Chairman
 Denver Botanic Gardens
 909 York Street
 Denver, CO 80206

Associates Plan Annual Meeting

The Associates of Denver Botanic Gardens have scheduled their 1989 annual meeting and luncheon to discuss plans for the upcoming winter season and new year. This business meeting will get underway Wednesday, October 25, in John C. Mitchell II Hall at 10:30 a.m. Lunch will follow at noon. At 1:00, Don and Carolyn Etter, manager of Denver's parks and recreation, will present the program, "A Vision for Denver: Parks and People in the 21st Century."

We hope all Associates will plan to attend. The meeting is an opportunity to socialize with other volunteers and learn about the many different Associates activities.

Please confirm your reservations with Alva Schloss (333-4980) by October 11. There is no charge for the luncheon for Associates' members who joined prior to July 31. The charge is \$7.50 for guests and new Associates.

Please contact Loddie Dolinski (753-1475) if you need additional information or have any questions.

Just a reminder: Totalling volunteer hours is an important part of completing the Associates' year. If you have not already turned in your volunteer hours to your chairman or to Lucile Downer, please do so by October 15.

Iris Expert Brian Mathew at the Gardens

You are reminded that the first Sunday of October is the lecture by Brian Mathew, who is considered by many, the greatest horticulturist/botanist on the scene today. His lecture "Iris in the Garden and in the Wild: A Current View" will reflect not only his years of horticultural experience but his botanical observations throughout southern Europe and western Asia.

The time of his talk is 7 p.m. on October 1. Call the education department, 331-4000, Ext. 20 to purchase tickets. They're \$4.00 for members of the Gardens and the American Rock Garden Society, \$7.00 for nonmembers. Tickets may be available at the door.

African Violet Sale

The fall African violet sale by the Rocky Mountain African Violet Council will be Saturday, October 14, in John C. Mitchell II Hall.

The October sale will offer large, expertly grown specimen plants at low prices; part of the proceeds will be given to the Gardens. Hours of the sale are 9 a.m. to 4:45 p.m. For more information call 331-4000.

Down the Garden Paths in October

Is your yard drab and colorless this time of year? It needn't be. You have an opportunity in your own garden to create a myriad beautiful autumn scenes that could rival the fall color of the Eastern hardwood forests.

Take a stroll through the Gardens with a notebook this October. Notice the many plants that are adding their special fall hues. The following are just a few to look for.

Mountain ninebark, *Physocarpus monogynus*, is a Colorado native with late yellow-gold foliage, sometimes olive splattered with scarlet red. At a height of only four feet, it's a shrub that could fit into nearly any yard.

Spiraea japonica var. *alpina* f. *nana* is a neat, prostrate shrub whose tiny leaves vary from chocolate to red and where they're shaded, they persist in being green.

One of the wild gingers, *Arum italicum*, whose marbled leaves are so eye-catching during the early part of the year, is now sporting one-foot spires of screaming-scarlet berries that will glow in even the shadiest nook of your garden. It's an herbacious perennial that no woodland setting should be without.

The Gardens displays several different mountain ashes, *Sorbus* spp. If you've been looking for a medium-small tree with attractive summer foliage, pretty berries and autumn color look no further. Fall shades range from camel tan to chocolate, russet and scarlet.

Naturally, this list is just a teaser. When you visit the Gardens this month you'll find dozens more to add to your list of autumn brighteners.

Wanted Rain Forests Alive

Although many of us have never visited a rain forest, virtually everyone's life has been touched by them.

Do you slice bananas on your breakfast cereal, sprinkle cinnamon on your toast, sip coffee, cocoa or a citrus juice while sitting on your rattan chairs over a rosewood floor surrounded by anthuriums, philodendrons or scheffleras?

The week of October 22 to 29 is World Rain Forest Week. It is a time to raise your awareness to the facts. A few years ago rain forests covered seven percent of the globe. More recently, sadly, that figure verges on two percent. What happens when they are gone?

Aesthetically, we'll be depauperate. No more orchids, bromeliads, mosses, ferns or lianas dripping from majestic trees. No more colorful croaking toucans, jabbering parrots or howling monkeys in their aerial canopy highways, and even though we may never visit the rain forests, our summer resident birds depend on them.

More importantly, we depend on rain forests to preserve our planet. Our climate is moderated by them, carbon dioxide levels are balanced by them, erosion is prevented by them and watersheds are replenished by them. Our futures depend on rain forests' genetic wealth. And last, but by no means least, tribes of indigenous people call them home.

Please give a few moments time to be thankful for all the rain forest's gifts, and if you have a few more moments—read! Appreciation first, education next, then action. Reward for rain forests, not dead but alive!



Learn how to prevent this kind of destruction in the tropics.



Winter Border Preparation

(one session)

Tuesday, October 3
5:30 to 7:00 p.m. Classroom C

Winter will soon be upon us and the big question gardeners are facing is "are your perennials ready for the fluctuations of Colorado's climate?" Do you know what to do in the border to help your plants survive?

Learn tips practiced by the experts and glean ideas from an experienced, popular perennial gardener.

If the weather allows, students may gain some tips from observing practices in the Gardens' perennial border. This session is a perfect follow-up for previous "Perennial Pleasures" classes held this year. Students are welcome to bring a snack to this meeting.

Instructor: Andrew Pierce is a horticulturist and is Assistant Director of DBG. He is an accomplished grower of perennials and alpine plants and his garden was recently featured in *Fine Gardening*.

Fee: \$5 members/\$5.50 nonmembers

Limit: 18



Beginning Bonsai

(four sessions)

Thursdays, October 5, 12, 19, 26
7:30 to 9:30 p.m. Classroom B

This popular introductory course will cover the history and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of bonsai will be included.

Each student will take a completed bonsai home and all materials will be provided.

Instructors: Keith Jeppson, past president of the Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 17 years. Harold Sasaki is a commercial bonsai grower with 18 years of experience. Both are lively, capable and popular teachers with much experience.

Fee: \$54 members/\$59 nonmembers (includes \$22 for materials)

Limit: 16



Native Colorado Conifers and Their Natural History

(two sessions)

Sundays, October 15, 22
2 to 4 p.m.

Morrison Center at DBG

Can you distinguish a one-seeded juniper from a pinyon pine? Learn

how to correctly identify Colorado's native junipers, pines, spruces and firs from characteristics such as cones, needles and bark.

Look at cross sections and fresh branches and discuss annual rings. Specific plants, animals, climate and soils associated with our evergreens will all be covered.

Bring note-taking materials and a hand-lens, if you have one.

Instructor: Tina Jones

Fee: \$20 members/\$22 nonmembers



The Natural History of Elk

(two sessions)

Sunday, October 8
2 to 4 p.m. at the Morrison Center at DBG and

Monday, October 9
4:30 to 6:30 p.m.
(field trip)

As the night temperatures begin to drop in the fall, the mountains of Colorado echo with the courtship of bugling elk. The call sounds somewhat like a melodious flute. Elk behavior and courtship, plant foods ingested and territory and habitats of elk in the United States will all be covered in this two-session class.

In addition to learning about the natural history of elk, participants in the second class will carpool to the foothills to hopefully hear the elk bugle. Although we hope to hear this sound, there are never any guarantees. Participants are encouraged to bring a picnic supper for the evening outing.

Instructor: Tina Jones, popular field trip leader and naturalist, studied alpine ecosystems at the University of Colorado, Boulder, Research Center outside of Ward, Colorado.

Fee: \$16 members/\$17.50 nonmembers

Limit: 20



Expanding Your Houseplant Horizons

Epiphytes and Near-Epiphytes

(three sessions)

Saturday, October 7, 14, 21
8 to 11 a.m. Classroom A

Those fascinating tropical plants that grow above the ground, perched in trees or on mossy outcroppings or rocks, present special challenges to houseplant gardeners. They have acquired the reputation of being difficult. You'll find that they're merely different.

During the three sessions the lec-

tures will introduce you to the special habitats and cultural requirements of begonias, gesneriads, ferns (including staghorns), orchids, bromeliads, aroids, (including anthuriums) and forest succulents (such as hoyas and epiphyllum cacti). And, as a result of the hands-on demonstrations in potting and propagation, you will add some of these interesting plants to your collections.

Instructor: Larry Latta is botanist-horticulturist for public information at the Gardens. He has been an orchid hobbyist for over 15 years and a popular DBG instructor.

Fee: \$48 members/\$53 nonmembers (includes \$14 for materials)

Limit: 16



Photographing Mountain Wildflowers: Hints for Artistic Achievement

(one session)

Thursday, October 12
7:00 to 9:00 p.m. Classroom C

Explore both sides of the photographic spectrum—the mechanics and the sheer artistry. Without this combination a photograph is only a simple photo.

This slide presentation will present photographic equipment such as cameras, lenses, tripods and gadgets that can be used to advantage when photographing wildflowers. Learn how to improve both your mechanical and artistic skills for sharp, well-composed pictures. Hints collected in this class will lead to creating artistically pleasing photographs that you will proudly share.

Plan your schedule to allow for a highly motivated weekend in the Colorado mountains photographing the fall colors. After this two-hour program, you will find yourself packing for a weekend trip on your own to exercise your new knowledge.

This slide program was enthusiastically received at the recent Garden Writers Association of America Rocky Mountain Conference hosted by the Gardens.

Instructor: Robert Heapes is a popular field trip leader who has hiked thousands of miles throughout Colorado. A distinguished speaker, he has lectured throughout the United States and delivered the 1985 Carl Tempel Wildflower Lecture at the Gardens. His photographic works have been published in *Colorado Homes and Lifestyles*; *Pacific Horticulture*; *Horticulture*; and *Flower and Garden*.

Fees: \$6 members/\$7 nonmembers

Forcing Bulbs

(one session)

Saturday, October 21

Section I: 9 to 10:30 a.m.

Section II: 11 a.m. to 12:30 p.m.

Classroom B

The process of causing spring-flowering bulbs to bloom by other than conditions that occur naturally outdoors is called forcing. Learn this inexpensive technique so that you can enjoy an assortment of spring blossoms while it is cold and dreary outside.

Each student will pot up several types of bulbs during class to take home. Please bring a small sturdy box to transport them.

Instructor: DBG Education Director Pat Pachuta is a horticulturist with much teaching experience.

Fee: \$14 members/\$15.50 nonmembers (includes \$8 for materials)

Limit: 15 per section



Autumn Conifer Walk

(one session)

Friday, October 27

8 to 9:30 a.m.

In Colorado conifers are the glory of the winter garden, and since winter occupies a rather large space on the garden calendar, it behooves us to look beyond blue spruce and junipers, junipers and junipers to the tremendous range of miniature and small conifers that have become widely available in recent years.

Come take an autumn walk through the Rock Alpine Garden with its curator and see the delightful picture that can be painted with dwarf conifers, autumn foliage and the last flowers of the season. A list of conifers in this garden, with their ages, will be provided. Sources—local and mail order—will also be given.

Meet: promptly in Rock Alpine Garden.

Instructor: Panayoti Kelaidis is curator of our award-winning Rock Alpine Garden as well as an enthusiastic teacher who enjoys sharing discoveries gleaned from his eight years at Denver Botanic Gardens.

Fee: \$5 members/\$5.50 nonmembers

Limit: 20



The Case of the African Violet

(one session)

Saturday, October 28

10 a.m. to noon

Classroom A

This is a class for enthusiasts who want or need information on the basics

of African violet care: lighting, feeding, watering, temperature control, cleaning, soils, pests, propagation and more.

Bring one or two of your African violets to this class and learn why it won't grow—or why it has grown so tall. Learn the art of leaf propagation and how to separate "babies."

This hands-on workshop will be chock-full of information and what you don't retain from the informal work-lecture format you can take home in a handout especially prepared by your instructor.

You need only bring a clean, sharp knife and, if you wish, a pest-free plant or two from your own collection. The instructor will provide cuttings, but if you have a problem plant, you can benefit from her guidance and experience.

Instructor: Debbie Griffith has been growing African violets for 12 years. She is currently president of the Rocky Mountain African Violet Council and senior show judge. She has taught many workshops and has helped other enthusiasts to understand their plants.

Fee: \$10 members/\$12 nonmembers (\$2 material fee is included)

Limit: 20



Pine Needle Ornament Workshop

(one session)

Saturday, October 21

9 a.m. to 3:30 p.m.

Morrison Center at DBG

Experience the delightful craft of making delicate lacelike pine needle ornaments to adorn your holiday tree or your home for months to come. Each student will be provided with a number of stitch patterns and basic instructions to proceed. They will then develop their own unique ornament, stitching with raffia to coil pine needle bundles around a wide selection of wire shapes.

Later, students can further embellish their ornaments with feathers, pine cone "petals" or miniature pine cones. Don't forget your scissors and a sack lunch and beverage; all other supplies will be provided.

Instructor: Debbie McClelland studied art education at Eastern Michigan University and has conducted many classes and demonstrations that showcase her expertise in this revived Civil War art.

Fee: \$27.50 members/\$30 nonmembers (includes \$3 for materials)

Limit: 10

Botanical Illustration

(five sessions)

Tuesdays, October 24, 31

November 7, 14, 21

9:30 to 11:30 a.m.

Classroom B

This course is designed for beginning and continuing students. It will stress accurate drawing of flowers, roots, stems and leaves (especially fall foliage and berries). Fresh plant material will be used in each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first class.

Instructor: Angela Overy

Fee: \$50 members/\$55 nonmembers (includes \$6 for materials)

Limit: 20



Watercolor Painting

(five sessions)

Wednesday, October 25,

November 1, 8, 15,

(skip 22), 29

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Classroom A

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of watercolors with emphasis on the freedom of personal expression.

Come prepared with supplies. You'll need: one-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Lynette Swanson-O'Kane is a graduate of the Philadelphia College of Art and a professional artist with national representation of her work.

Fee: \$60 members/\$66 nonmembers

Limit: 12



Beginning Wheat Weaving

(three sessions)

Wednesdays, October 25,

November 1, 8

7 to 9 p.m.

Classroom B

Wheat weaving, also known as corn dolly plaiting or straw decoration working, is a centuries-old craft that was practiced in almost all of the grain-producing countries. In this series of workshops students will learn how to clean and work with wheat.

continued on page 8

continued from page 7

Various wheat weaving techniques will be taught to complete harvest wreaths, mordifords, Welsh fans and other unique decorations.

Please bring a ruler and scissors to class.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$30 members/\$33 nonmembers (includes a \$6 materials fee)

Limit: 12



Christmas Ornaments from Straw and Wheat

(one session)

10 a.m. to 3:30 p.m.

Morrison Center at DBG

Section I: Saturday, October 28

Section II: Saturday November 4

Please indicate your section on the registration form.

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each year for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan

Fee: \$25.50 members/\$28 nonmembers (includes a \$5.50 materials fee)

Limit: 12



For Parents and Children: Carve-O-Lantern Party

(one session)

Saturday, October 28

Session I: 9 a.m. to 11 a.m.

Session II: noon to 2 p.m. Classroom B

Celebrate Halloween by attending a pumpkin carving party. Using a special Carve-O-Lantern kit, children 8 and over and a parent will make incredible jack-o-lanterns. This is your chance to get wildly creative and turn an ordinary pumpkin into a masterpiece. Afterward, sip cider and nibble on roasted pumpkin seeds.

Please bring one or two pumpkins of any size to class. You may enter your creations in the Gardens' "The Complete Pumpkin" contest described on page 3 in this newsletter.

Instructor: Tina Goldstein is a fiber artist who studied at the University of Northern Colorado. She is a champion pumpkin carver and an enthusiastic teacher.

Fee: \$10 members/\$11 nonmembers (fee includes one parent and one child as well as one pumpkin carving kit)

Limit: 15 children and parents per section

Learn how to carve pumpkins in "Carve-O-Lantern Party."



Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ ZIP _____

Daytime Phone _____ Evening Phone _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

The Flower Arranger's Garden

By Rosemary Verey. Little, Brown and Company, \$29.95. SB473.V4 1989

If you are a gardener who enjoys the beauty of flowers in the home as well as in the garden, then *The Flower Arranger's Garden* by Rosemary Verey is a must for your summer reading list. This colorful book includes all the information you'll need to create a versatile garden that will provide abundant flowers and foliage for designing your own arrangements throughout the year.

Ms. Verey dismisses the idea that it is a sin to rob the garden to adorn the house, and she proceeds to show the reader how to plan and plant a garden where it is possible to do both. She has designed and illustrated seven different garden plans for a variety of locations and color schemes, including a water garden and an herb bed for the cook who is also a flower arranger. The most enjoyable aspect of this book, however, is the artistically stunning photography by Linda Burgess. There are plenty of ideas for creating arrangements in every season, as well as for holidays and special occasions.

Along with the extensive garden designs and photographs, you will also find a wealth of technical information. One chapter is devoted entirely to a list of 64 essential plants, grouped by color, as well as a description and photograph of each. Information on gardening techniques such as pruning, propagation and garden upkeep is presented in a well-illustrated, easy-to-read format. In addition, there is instruction concerning the mechanics of flower arranging, covering everything from the proper way and time to pick flowers to drying and arranging techniques.

The Flower Arranger's Garden can be read in an afternoon, but contains enough ideas to last a lifetime. It is custom-made for those who enjoy creating their own flower designs.

Teri McLain
1989 summer college intern at DBG

(This book is available in the gift shop.)



Perennials for American Gardens

By Ruth Rogers Clausen and Nicholas H. Ekstrom. Random House, New York, 1989. \$35.00. SB434.C5 1989

Every so often a book appears that deserves a place on every gardener's bookshelf. This guide to perennials is such a work, for it concisely and clearly presents a wealth of information. The authors confine themselves to those herbaceous perennials and subshrubs that they feel possess a special merit for the garden.

Arranged in encyclopedic fashion and using Latin binomials, these authors discuss, in an interesting and humorous manner, a large variety of species, cultivars and hybrids. The "rapid reference lines" tell the user at a glance the description of the flower, its flowering time, hardiness, basic needs and its availability. Photographs of natural settings show plants, "warts and all," so the reader can judge how a specimen will look as it begins to die back, is certainly necessary information when trying to place a plant in the garden. Should you decide on a flower, the text gives more detailed information on pests, care, propagation, soil and more. Suggestions for complimentary plantings given here and there.

The appendixes include more information on soils and general care, as well as a list of nurseries and seedsmen, specialist societies and display gardens. There is a glossary of commonly used terms, an index of synonyms, and an indispensable index of common names. For further reading, the authors include their bibliography. Our family's lesser botanist declared this "a perfect book for someone like me who knows a little about gardening, but wants to know more," while a more knowledgeable gardener described it as "a wonderful book." I found one minor typographical error, but I will let you have the fun of locating it for yourself.

Virginia Stratton
Member DBG and
volunteer

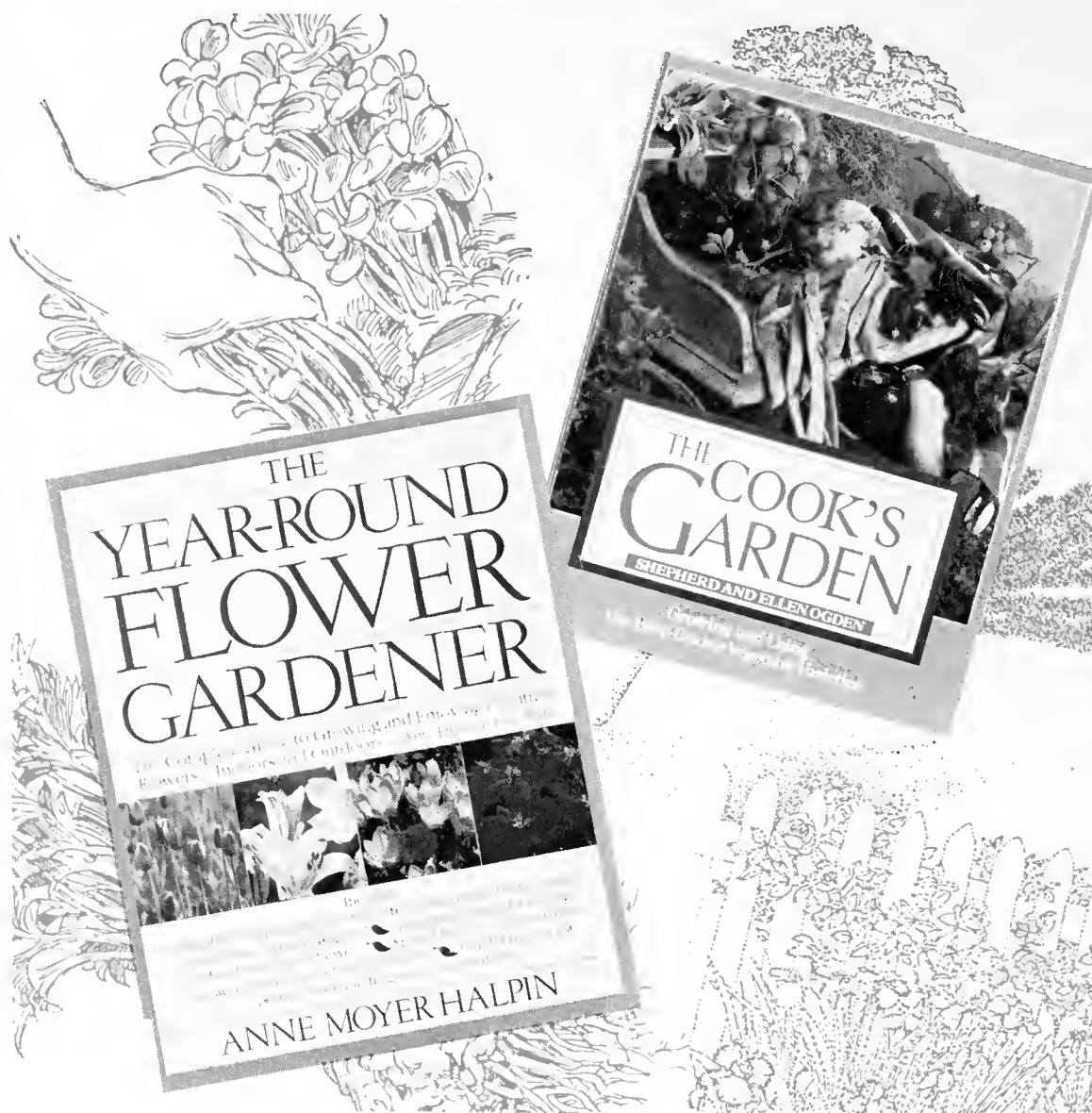
(This book is available in the gift shop.)



LIBRARY NOTES

Helen Fowler Library
Volume 12, No. 4
October 1989
Librarian:
Solange Gignac





The Year-Round Flower Gardener

By Anne Moyer Halpin. Summit Books, New York, 1989. \$15.95. SB405.H34 1989

In *The Year-Round Flower Gardener*, Anne Moyer Halpin tries to put an order to the ever-changing process of flower gardening. She does this by organizing the information in her book by seasons, beginning with spring.

Within each seasonal section there are parts on early, mid- and late-season garden activities, flowers and typical colors for that season, good color combinations for plantings, and special topics. The special topics are of extra interest as they address items not usually covered in basic gardening books. Some are Working with Color, Container Gardens, Fragrant Gardens, Night Gardens, Dried Flowers, Cutting Gardens and Forcing Bulbs.

These last two sections contain information that makes it possible for the amateur gardener to do the things commercial and professional growers do so enviably. The information on cutting garden flowers includes a flower-by-flower list of how to condition and care for cuttings, and includes many flowers that most of us would never consider using as cut flowers. The section on forcing bulbs provides a list of bulbs, corms, tubers, rhizomes and tuberous roots that can be forced every winter, with cultural information on each, and handy charts showing planting depth, planting time and blooming time. The list also includes

flowers not commonly used for forcing, such as the *Anemone coronaria*, poppy anemone, and calla lilies.

There are two appendixes in the book and a helpful index. The first appendix is a complete blooming schedule of many basic garden flowers, with cultural information. The second is a seed and plant source list.

This book looks at a wide range of gardening activities, with quite a bit of information, but because of the general view, specific information is, by necessity, somewhat limited. The author gives basic information on many subjects, which is enough to allow the readers an opportunity to determine their interest and whether they need more information on a specific subject.

Ms. Halpin has created in *The Year-Round Flower Gardener* a handy gardening book. The style is easy to read, and the organization makes it a useful and quick reference. This book would be excellent reading for the gardener who is ready to grow and develop in new areas. The wide variety of information provided should put this book alongside such books on your shelf as *Sunset's New Western Garden Book*.

Michael Orlin
Armchair gardener

The Cook's Garden

By Shepherd and Ellen Ogden. Rodale Press, Emmaus, PA, 1989. \$19.95. SB321.035 1989

There is a salad green almost all of us grow that the authors, Ellen and Shepherd Ogden, state we will welcome just as we do the daffodils. You can even buy cultivated varieties of the dandelion (*Taraxacum officinale*) through the Ogdens.

The Cook's Garden is divided into three parts: The Kitchen Garden Connection, The Best of the Garden, and In the Kitchen. Part three includes a list of 35 seed sources and an index.

Part one, The Kitchen Garden Connection, is a mere 12 pages long. Topics discussed include: Growing the Best, Getting Ready, Planting Out, Growing Up, Weeding, Harvesting and Special Treatments. More time is spent on types of trays that may be used to start seedlings and on plant arrangements in the garden than is spent on soil preparation (one paragraph). Twenty-three garden crops and their relatives are discussed in part two. The old favorites are included as well as herbs, various salad crops and root crops. Growing, harvesting and a list of the best varieties are subtopics of each vegetable discussed.

The best part of this book is the variety source charts. Basil alone gets over a page. Included on the lists is when to plant, harvest, what part of the plant to harvest, informational comments and sources listed by codes, such as CG/NG/BP/PK. As you refer to the source list at the end of the book, the initials become more recognizable, though the system can be cumbersome.

The authors make many references to their locale, Vermont, and its growing season. This information is useful to Colorado gardeners who may experience similar seasons.

The recipes at the end of the book are definitely for vegetable lovers, although they are not necessarily vegetarian. Most dishes may be prepared with purchased items if your garden isn't as extensive as the authors', or if the plant is out of season.

The Cook's Garden is for the gardener who has a good plot of soil, some experience and who would like to try new varieties in their garden and diet.

Marie Orlin
Nursery person for
Neils Lunceford,
Silverthorne, CO



Gardening: Tasks for October

October is a month for relatively small chores in your garden. This is good because our weather in October is so changeable that sometimes only the little jobs can be fit in between the fickle weather shifts.

Planting hybrid lily bulbs, although it takes some effort and planning, is a minor chore in relation to the huge rewards you'll receive. Contrary to tradition, these true lilies do very well in most parts of Colorado. Given a partly sunny location, shaded in the afternoon with deeply enriched, well-drained soils and moisture throughout the year, lilies flourish, bloom and multiply readily. They are perennially beautiful and dependable.

The unplanted bulbs should be given special care, though. As soon as your lily bulbs arrive "in the mail" (nowadays it's usually a UPS van that brings them) or you bring them home from a local nursery, put them in the vegetable drawer of your refrigerator. But don't forget them there. If you haven't already prepared a spot in your yard for your new lilies, get to it the first chance that our fickle October weather offers.

You'll notice that your hybrid lily bulbs are quite unlike the bulbs of tulips, hyacinths and narcissi or the corms of crocus or gladioli: The lily bulbs aren't protected by a papery covering. This indicates that they're unable to endure exposure to the drying air. Even in the refrigerator, protected with the moist sphagnum or redwood fiber in which they are sometimes shipped, these living, nondormant plants may deteriorate quickly.

Also, the roots of lilies, like those of most of our bulb plants, need cool (not frozen) soil in which to grow. This root development during autumn is necessary to support not only next summer's flowering, but all of next year's healthy growth as it prepares the plants for their long, productive life ahead. In short, get lily bulbs into the soil as early as possible this month.

While lilies are quite hardy here, dahlias, tuberous begonias and gladioli aren't. It's time to prepare them for storing over winter in a dry and cool, but frost-free, indoor location. Clean off all clinging soil then prune their frosted or yellowed tops back to a half inch above the "bulb" and pack them in sawdust, peat moss or dry sand. Break the withering remains of this last year's gladiolus corm from the new vigorous one before storing. Gladiolus corms may even be hung for the winter in a porous net bag. Make it a habit to check

your stored treasures on a monthly basis, discarding immediately any decomposing bulbs to protect the rest from contamination.

It's time to cover your carrots, leeks and parsnips to protect them for later digging. Pile a foot of dry straw over them, making sure the pile reaches well beyond the vegetable bed boundaries. This is to keep the ground from freezing solid, allowing you to go out to dig them anytime. You can harvest your carrots and leeks up until late winter. However parsnips need to undergo three or four good hard frosts before they develop a sweet flavor.

It's too early, though, to mulch perennials or to cover the bases of your roses. Hold off on these until December or January.

Elsewhere in your yard, clean up all debris under and around any plants that showed signs of disease this year. Don't put this material into your compost heap; bag it and discard it with your trash. Plants to check, being prone to various fungal, bacterial or viral problems, are apples, crabapples and mountain ash (fireblight); tomatoes (several viruses); phlox, zinnias, and virginia creeper (powdery mildew); and roses (blackspot).

One final chore for October: If you had put away your bird feeder for the summer, it's time to get it back out, clean it up and begin feeding the birds again.

Larry Latta is the botanist-horticulturist for public information at DBG.

Tempel Wildflower

continued from page 1

many factors have come into play. These include their daily and seasonal activities, the learning abilities

of individual animals, the rewards offered by flowers—and the deceitful floral trickery some plants have developed to assure pollinator relationships. The stories of these fine-tuned partnerships are as numerous as the species. Dr. Drummond will use his skills as a photographer, teacher, writer and lecturer to illustrate these relationships.

Dr. Drummond holds a doctorate in ecology from the University of Florida. He is currently Director of Pikes Peak Research Station near Florissant and the editor of the *Journal of the Lepidopterists' Society*.

The Carl Tempel Wildflower Lecture Series was inaugurated in 1979 to honor the late Major General Carl W. Tempel of Fitzsimmons Army Medical Center. He was a great photographer and wildflower enthusiast. His wife, Ruth Tempel, is a dedicated volunteer in our gift shop.

This year's lecture is Wednesday, November 1, at 7:30 p.m. in John C. Mitchell II Hall. There is no admission fee and it is open to the public.

Let It Be!

*You're picking a wildflower—
But why?*

Just to take it home to die?

Let it be! Let it be!

Growing wild and free,

Just where it was meant to be.

*It would give you a few
moments of joy,*

But, oh! how sad to destroy!

Let it be! Let it be!

Growing wild and free,

Just where it was meant to be.

*(Contributed by Gloria R. Barron of
Colorado Springs)*



COLORADO

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

A	L	E	N	D	A	R
S	M	T	W	T	F	S
1 Brian Mathew's Lecture on Iris	2	3 Winter Border Preparation	4	5 Beginning Bonsai*	6	7 Expanding Your Houseplant Horizons*
8 The Natural History of Elk*	9	10 Bonfils-Stanton Lecture	11	12 Photographing Mountain Wildflowers*	13	14 Pumpkin Festival at Chatfield, African Violet Sale
15 Native Colorado Conifers and Their Natural History	16	17	18	19 Trevor Barrett Lecture, "South Africa's Beauty and Beasts"	20	21 Pine Needle Ornament Workshop*, Forcing Bulbs
22 October 22-29 "World Rain Forest Week"	23	24 Botanical Illustration	25 Wheat Weaving*; Watercolor Painting*; Associates Meeting	26	27 Autumn Conifer Walk	28 Ornaments from Straw and Wheat, Day of Discovery, Carve-O- Lantern Party
29	30	31 November 17-18 Holiday Sale				
Coming Next Month						
November 1 Tempel Wildflower Lecture	November 11-12 Gloxinia Gesneriad Show and Sale	November 21 Day of Discovery				
November 3-5 Botanical Treasures	November 14 Bonfils-Stanton Lecture	November 23 Thanksgiving, Gardens is open				

Coming Next Month

November 1
Tempel
Wildflower
Lecture

November 3-5
Botanical
Treasures

November 11-12
Gloxinia
Gesneriad Show
and Sale

November 14
Bonfils-Stanton
Lecture

November 21
Day of
Discovery

November 23
Thanksgiving,
Gardens is open

Denver Botanic Gardens, Inc.

909 York Street
Denver, Colorado 80206
303-331-4000

Address correction requested

TIME VALUE

October 1989



Non Profit Org.
U.S. Postage
PAID
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Denver, CO

*First meeting
of a class with
more than one
session



NEWS

**Denver Botanic Gardens
November 1989
Number 89-11**

Don't Miss the Holiday Sale

The annual holiday sale for Denver Botanic Gardens is almost here! Circle November 17 and 18 on your calendar now so you won't miss it. This is not just a chance to support your gardens — it's an opportunity to buy crafts, gifts and holiday items you won't find anywhere else in town.

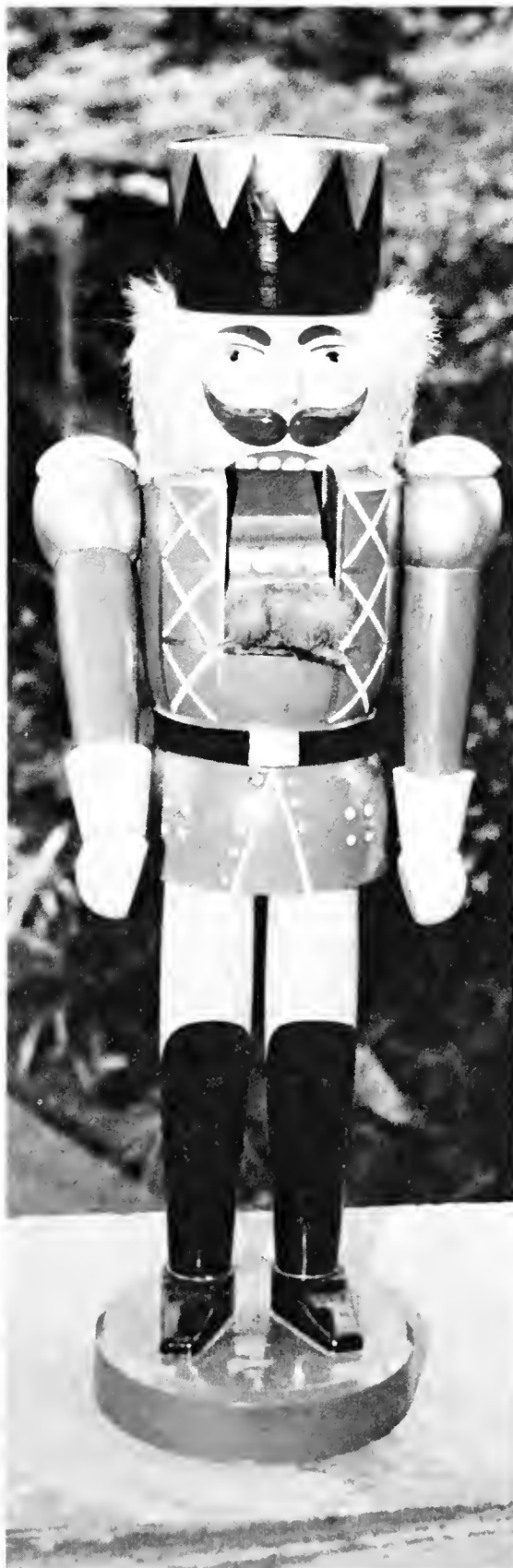
Hand-crafted items from our volunteers include wreaths, tree ornaments, refrigerator magnets. Potpourri in several fragrances is available in decorative jars or sewn into tranquility pillows, sachets and tooth-fairy pillows. Using dried herbs and spices,

.....
***"the best honey by a
dam site"***
.....

the craft workers have also prepared seasoned salts, salt-free seasoning mixes, simmering mixes, catnip mice and (new this year) fireplace mixes. Throw a handful on the fire for color and fragrance. Dried herbs for use in cooking and making potpourri will also be available.

The Denver Botanic Gardens Guild will again be featuring its herbal vinegars brewed from secret recipes. Also look for herb and spice mixes for seasoning and dips, bean soup mixes, spice-filled trivets and herb charts. One member was heard stating, "I prefer the Gardens' vinegars over any others in town and plan to be at the sale first thing Friday morning to buy my annual case."

In the main lobby the Guild will sell dried flowers and other plant material
continued on page 4



Executive Director Merle M. Moore Resigns

On September 15, the Manager of Parks and Recreation, Don and Carolyn Etter, announced the resignation of DBG Executive Director Merle M. Moore. In accepting the resignation letter, the Etters said, "We are pleased and impressed with the growth and development of Denver Botanic Gardens under Merle Moore's direction over the past 11 years."

Board President Bea Taplin spoke for the Board in saying, "Merle Moore has been a dedicated Director and hard-working administrator who has worked steadfastly for the best interests of Denver Botanic Gardens."

Mr. Moore has resigned to pursue other interests for which he has found little time during the past few years. Assistant Director Andrew Pierce is presently serving as Acting Director in this interim period.



Inside:

*Tempel
Wildflower
Lecture*
page 2

*Herald the
Season*
page 3

*More on
Holiday Sale*
page 4

*Botanical
Treasures IV*
page 5

*Holiday Gift
Memberships*
page 5

*Blossoms of
Light*
page 6

*Above:
Merle Moore,
Former
Executive
Director
of DBG*

*Left:
Andrew Pierce,
Acting Director
of DBG*

2 Tempel Wildflower Lecture November 1

Join Denver Botanic Gardens in welcoming photographer, teacher, writer and lecturer Dr. Boyce A. Drummond to this year's Carl Tempel Wildflower Lecture in honor of the late Major General Carl W. Tempel of Fitzsimmons Army Medical Center.

Explore fascinating flower and insect interactions as Dr. Drummond illustrates these relationships with a slide presentation titled "Insects and Flowers: The Biology of a Partnership."

The lecture is Wednesday, November 1, at 7:30 p.m. in John C. Mitchell II Hall. There is no admission fee and it is open to the public.

Did You Know?

Tropical rainforests occupy only 2 percent of the earth's surface but contain 50 percent of its biological species.

Tempel Wildflower speaker
Dr. Boyce A. Drummond



Tributes

In memory of Jean Busby

Mr. & Mrs. William C. Collister

In memory of Ralph Dutton

E. Sydney Glick

In memory of Ruth Hubner

Susan Mathews

In memory of Michael W. Lubchenco

Mrs. Brown W. Cannon, Sr.

In memory of Emma Mixa

Mr. & Mrs. Ivan Baxter

Harold & Frank Hurst

Mr. & Mrs. Oliver Pine

In memory of Charles Nicola

Mr. & Mrs. John C. Mitchell II

In memory of Molly Katherine Powers

Sue Dunahay

Shelle McLean

Kim Peterson

Vickie Thomson

In memory of Mrs. Ethel Raleigh

Allyne E. Lawless

In memory of Melvin Sweet

Alice L. Fisher

In memory of John F. Welborn

Mrs. Richard N. Davis

In memory of L. V. Wilson

Winifred Wortman

In memory of

Mrs. J. Churchill (Peg) Owen

(Restricted to the Alice Mann Owen Internship Fund in Applied Horticulture)

Mary Lou and Jack Allen

Mimi and Don Bain

Christopher Bancroft

Staff of Boys Club of Metro Denver, Inc.

Helen T. Breitenstein

Friends at C.R. Brown Companies

Elizabeth H. Brownell

James & Patricia Bye

Celestial Seasonings Inc.

Mrs. A. Werk Cook

Dr. & Mrs. Ralph L. Cotton



Mr. & Mrs. W.W.J. Croze, Jr.

Mrs. Richard N. Davis

Judson & Sharon Detrick

Mrs. Eugene Dines

Mr. & Mrs. Richard Downing

Ellen & John Eddy

Garden Club of Denver

Mr. & Mrs. Frederic Hamilton

David F. Harris

Mr. & Mrs. N. Berne Hart

Mr. & Mrs. James R. Hartley

Mrs. Josiah G. Holland

Paul & Mary Holleman

Mrs. Lena P. Holme

Holme Roberts & Owen

Helen K. & Arthur E. Johnson Fdn.

Mr. & Mrs. George J.M. Kelly

William H. Kistler

Mr. & Mrs. Roger D. Knight, Jr.

Mrs. Ruth R. Koch

Herbert F. Koether

Mr. & Mrs. Bruce Kohler

Mr. & Mrs. Wilbur M. Lakas

Mr. & Mrs. Lawrence A. Long

Ms. Joanne Lynes

Mrs. Dee Ann Mangels

Brent V. Manning

J.E. & Jennie McElroy

Mr. & Mrs. Donald C. McKinlay

James M. McMullan

Mr. & Mrs. John C. Mitchell II

Mr. & Mrs. David R. Murphy

Dora & Peter Neidecker

Mrs. Charles Nicola

Mrs. Charles P. Orr

James Churchill Owen III Family

Taylor M. Owen & Family

Thomas Page Owen, Jr.

Mr. & Mrs. Allan R. Phipps

Lois S. Robertson

Mr. & Mrs. F. George Robinson

Mr. & Mrs. William J. Rundorff

Mrs. A.G. Rydstrom

Mailing List Memo

The Gardens is being asked by other non-profit cultural institutions to participate in the exchange of membership lists. The purpose of these exchanges is to build our respective membership programs. Although discretion is used in determining with whom we exchange lists, we realize that some of our members would not care to have their name used in this manner. Therefore, we would like to give you the opportunity to tell us so.

If you do *not* want your name exchanged with other cultural institutions, cut out your mailing label from the back page and return it to:

Denver Botanic Gardens
Membership Office
909 York Street
Denver, CO 80206

Attach to it a note stating, "I do not wish my name to be used for any purpose other than to receive information from Denver Botanic Gardens."



Mrs. Nancy Mann Sanson

Richard J. Schrepferman

Ms. Stephanie J. Shafer

Kevin Shea & Family

The Slipstream Foundation

Dudley & Ruth Smith

Dr. & Mrs. A.N. Spencer

Mr. & Mrs. Benjamin Stapleton

Jerome & Marcia Strickland

Mr. & Mrs. B.K. Sweeney, Jr.

Mr. and Mrs. William McKinley

Thompson

Dell & Lucia Lee Van Gilder

Mrs. J. Kernan Weckbaugh

Mr. & Mrs. William F. Wilbur

Staff of William Blair & Company

William Blair and Company

Green Thumb News

Number 89-11 November 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than October 20 for December, November 20 for January and December 20 for February.

Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Accredited by the
American Association
of Museums

DBG members and their children or grandchildren
are invited to

3



at Denver Botanic Gardens December 8, 1989, 7-9 p.m.

Special entertainment for children:

storytelling face painting Krako the Clown!

Hear the award-winning **"Girls' 21 Choir"** from Cherry Creek High School

View the decorations Enjoy holiday refreshments Experience the
conservatory at night Browse the Gift Shop for holiday gift ideas

Reservations are limited; **none accepted after December 1.** An entry card
will be mailed. It must be presented at the door.

Cost: \$3/adult (**up to 2 adults/membership**)

Children under 16 years old are free

**Reservation Form for Herald the Season
Friday, December 8**

Enclosed is a check for _____ \$3 for 1 adult or _____ \$6 for 2 adults.

Number of children under 16 attending is _____.

Name _____

Address _____

City _____ State _____ ZIP code _____

Daytime Phone _____ Member ID _____

(on top line of newsletter address label)

Mail to Denver Botanic Gardens, 909 York Street, Denver, CO 80206

4 Holiday Sale

continued from page 1

arranged in bouquets. They will also sell fresh rosemary plants for your windowsill.

Last year the honey gathered by Chatfield Arboretum volunteers sold out by Saturday morning, so come early this year or you might miss out! The honey is hand-gathered and processed using gentle, low-heat methods to retain the subtleties of flavor created by the native plant and wildflower nectars harvested by the busy bees of Chatfield Arboretum. The volunteers have claimed this is "the best honey by a dam site."

Books make great gifts, and the holiday sale is a wonderful resource for gardening and botanical books. Topics include perennial growing,

.....
"I prefer the Gardens' vinegars over any other in town and plan to be at the sale first thing Friday morning to buy my annual case!"
.....

designing or locating unusual landscapes, growing and using herbs, caring for bonsai, making potpourri and other uses for dried plant materials, arranging flowers, growing and identifying wildflowers and native plants, and numerous other special-interest topics. Children's books will be available and they make popular gifts from caring grandparents. Many of the



books are beautifully and lavishly illustrated as well as informative.

The gift shop buyers have been busy amassing a large and unusual assortment of gift items. The delightful cloth mache Father Christmases and carol singers will again be available, and this year whimsical animal figures dressed in Christmas costumes have been added.

Porcelain and china items will be featured, including Victorian Garden and Cabbage Patch china, musical birds, porcelain roses with silk leaves, Kaiser porcelain bird plates, limoges ware music boxes and musical banks.

Featured will be vases, candlesticks and candleholders carved of aspenwood. Also, look for the sculptures of birds and wild animals carved from ironwood—a hard, dark mahogany-like wood. These beautifully sculptured birds will make a perfect gift for someone's desktop.



New stationery designs will be available, including Primavera—an Italian floral with gold embossing. Look also for museum journals, day cards and notebooks.

The buyers found poinsettia designs by Pimpernel on placemats and coasters as well as Spode trays with Christmas trees and garden herb designs. These are great for holiday entertaining or for gift-giving.

For the cook on your gift list you'll find spice jars, cheeseboards, trays and a country cookbook by Portmeiron. They have Beatrix Potter ornaments and picture frames for young and young-at-heart animal lovers. The country-style decorators

.....
You will know that you are helping the Gardens grow by participating in fund-raisers like the holiday sale.
.....

will appreciate the diverse selection of fabric-covered boxes, picture frames and baskets. They also have decorated bird feeders by Droll Yankee, garden ornaments, large decorated pots and bird baths. For a more whimsical gift, look for Bloomingtail's handmade European clay barrettes.

Garden members purchasing gifts will receive two gifts. First, you will receive a 10 percent discount on purchases over \$10.00, and more important, you will know that you are helping the Gardens grow by participating in fund-raisers like the holiday sale.

Gift ideas from the Holiday Sale.

Volunteers will be available to help at the Holiday Sale.



Botanical Treasures IV Returns to the Gardens

Turner Art Gallery and Howard Lorton Galleries are cosponsoring Botanical Treasures IV, a benefit for Denver Botanic Gardens. November 3, 4 and 5 marks the return of this show to John C. Mitchell II Hall.

Turner Art Gallery's selection of botanical and natural history prints promises to be as elegant and exciting as ever. Botanical prints have become treasured collectibles for their elegance, simplicity and historical value. Howard Lorton Galleries' interior designers tell us another reason for the recent popularity of botanical prints: "They complement almost any decor."

The focal point of this year's show will be Howard Lorton's model room. They will demonstrate how floral fabrics and botanical prints work in harmony to enhance any room. We welcome Howard Lorton Galleries' participation in Botanical Treasures IV.

The staffs of both Turner Art Gallery and Howard Lorton Galleries will be happy to assist you in selecting just the right illustration, floral fabric or wallcovering for your home. Don't miss this exciting show and sale and the opportunity to start or add to your art collection. Why not get a print for that someone special on your holiday gift list?

172

AMARYLLIS

AMARYLLIS

173



5

Look for prints like this by John Hill, 1716-1775, at Botanical Treasures IV.



For the Holidays—Give a Gift Membership to the Gardens

Give the gift that friends will appreciate throughout the year—a Denver Botanic Gardens membership.

This thoughtful gift allows you to share your love of the Gardens with friends and family. Members receive this monthly newsletter offering dis-

counts on plant-related classes and timely horticultural information. Additionally, a library of horticultural books and magazines, exciting special events and members-only activities are just a few of the benefits you will be providing with a gift membership.

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens. With memberships in various categories, you can easily find one that fits all your needs. Complete the adjacent coupon, return it to the Gardens and we'll do the rest.

Holiday Gift Membership Form

Donor's Name _____
 Address _____
 City _____ State _____ ZIP code _____
 Phone _____

Recipient's Name _____
 Address _____
 City _____ State _____ ZIP code _____
 Phone _____

Date to mail gift card _____

Gift card to be signed _____

\$35 Family/Dual (two adults)
 \$25 Individual
 \$25 Senior Couple
 (both over 65, same address)
 \$18 Senior (65 and over)
 \$18 Full-time Student

☐ Cash ☐ Check
☐ VISA ☐ MC

Exp. _____

Signature _____

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens. Mail to Denver Botanic Gardens, 909 York Street, Denver, CO 80206. For additional details call 331-4000, Ext. 22.

6 Blossoms of Light in December

"A World of Trains" is this year's theme for "Blossoms of Light," the Gardens' annual December celebration sponsored by WearEver-ProctorSilex. Warren Mizell, of Mizell Trains, Inc., is coordinating an exhibit of trains from private collections. They will be on display in John C. Mitchell II Hall and in the lobby court from December 5 through the 30, where they are sure to please both the young and the young-at-heart.

The month's activities begin with a Quilt Show and Sale December 1 and 2. Any one of the modern or antique quilts in this fine collection from across the country would make a wonderful addition to most any room in your house. What a great idea for your holiday wish list.

Friday, December 8, 7 to 9 p.m., is reserved for members to enjoy a special evening at Herald the Season. Music, decorations and refreshments will put you in the holiday spirit. Traditionally, Herald the Season marks the first night of lights in the outdoor gardens. The new lighting displays will not only glisten in the gardens but spark the spirit and memories of past holidays in all of us.

Teddy Bear Teas, Saturdays, December 9 and 16, offer a modified high tea menu and entertainment specially planned for children. There will be 2 and 4 p.m. seatings each day. Tickets are \$8 for children and \$15 for adults. Children must be accompanied by adults. What better way to enjoy the

holidays than through the eyes of a child?

Sundays, December 10 and 17, at 2, 3:30 and 5 p.m., are High Tea times. A traditional high tea menu of pasties, Devon cream, scones and tea sandwiches will be served. Seasonal choral and instrumental music is planned to accompany these teas. Reservations are \$15 per person.

On Wednesday evenings, December 13 and 20, the Gore Range Brass Quintet will fill John C. Mitchell II Hall with music. The Quintet will perform from 7 to 9 p.m.

The Gardens will remain open until 8 p.m. on Wednesdays, December 13 and 20; the week of December 26 through 30; and the evenings following the High Teas and Teddy Bear Teas. This year new outdoor lighting displays have been added that are guaranteed to bring out the child in everyone. Inside and out, the Gardens will sparkle with lights and fun, making the Gardens the family place to be during the holiday season.

Look over the "Blossoms of Light" flyer included in this issue of the *Green Thumb News*, and keep it handy. There you'll find the registration form for High Teas and Teddy Bear Teas. To assure your place, register early.

For more information on any of the "Blossoms of Light" activities please call the Gardens at 331-4000, Ext. 25.

A Day of Discovering Floral Arrangements

A Day of Discovering Floral Arrangements for the holidays, Tuesday, November 21, will feature free demonstrations by creative teacher and friend of the Gardens Fran Wittgartner. A busy instructor of flower arranging, adept in many styles, she will share her skills and imagination in two sessions, at 10 a.m. and at noon, in Classroom C. The first will illustrate the use of dried and silk flowers in arrangements suitable for Thanksgiving and Christmas. The second will focus on fresh materials.

Mrs. Wittgartner is president of the Denver chapter of Ikebana International, a group that studies and promotes Japanese culture, including flower arranging. However, for these demonstrations she will offer a more traditional Occidental approach.

Coming as they do right before the holidays, these demonstrations will offer you an opportunity to get last-minute inspiration for decorating your own "groaning board" and your Christmas mantel as well.

Nonmembers are invited to attend. Only the Gardens' regular \$3 gate fee will be charged. Seating is limited.

For more information call 331-4000, Ext. 24.

Bring your teddy bear to the Gardens for a Tea in December.



Nature Photographer —John Fielder

On Thursday, November 9, from 7 to 9 p.m., John Fielder, nature photographer, will give a slide presentation and autograph his new book *Colorado—Lost Places and Forgotten Words*. In this coffee-table book he features 137 magnificent color photographs of five of the 18 wilderness areas of Colorado. He has paired each photograph with quotations by selected writers, many of whom have experienced Colorado's natural world firsthand.

"Colorado's scenic areas are tangible assets, vital to Colorado's economic future," Fielder says. "Nature photography publications document the intrinsic value of these assets and broaden public support for conserving irreplaceable lands."

Denver Botanic Gardens and John Fielder share a common goal: the preservation of our wilderness and its plant life. In both *Colorado—Lost Places and Forgotten Words* and his one-hour slide lecture Mr. Fielder invites us to join him in celebrating the scenic beauty of our state.

Be sure to be a part of this evening. An edition autographed by the author would make a beautiful gift for that special someone on your holiday list.

Gloxinia Gesneriad Growers Sale

As pretty and popular as African violets are, they only hint at the range of colors and beautiful flower and plant forms that are found in their family, the Gesneriaceae. On Saturday and Sunday, November 11 and 12, not only African violets but many other gesneriads will be on display and for sale at the Gardens by members of the Gloxinia Gesneriad Growers.

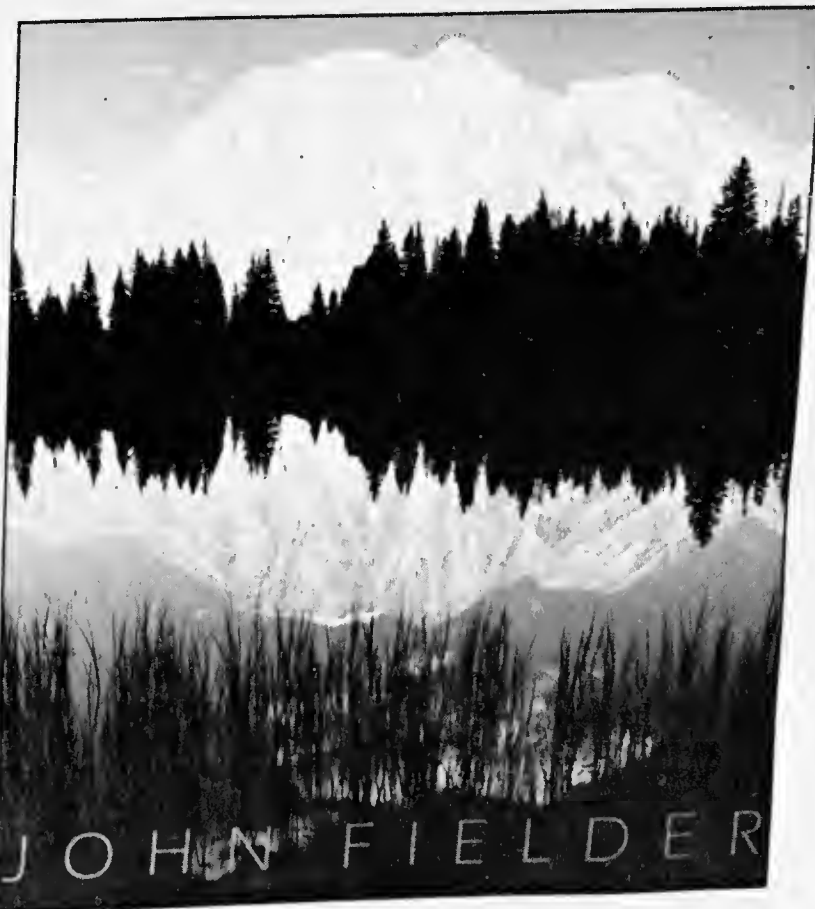
Titled "Hail! Glorious Gesneriads," the show will be open from 1 to 4:30 p.m. on Saturday and 10 a.m. to 4:30 p.m. on Sunday. Call Mary Spaar, 344-1997, or Ingrid Little, 751-3199, for more information. Proceeds will be shared with Denver Botanic Gardens.

James van Sweden Lecture Sold Out

Just a reminder to all of you fortunate ticket holders: Leave your calendars open Tuesday evening, November 14, for James van Sweden, the final lecturer in the popular Bonfils-Stanton Series. He'll mesmerize you with multiflorous meadows of bountiful beauties! The lecture is sold out.

DBG wishes to thank all of you for your generous support of this excellent lecture series. Watch your newsletters for announcements of the 1990 Bonfils-Stanton Lecture Series.

COLORADO



More on Plant Conservation

From its crevice home in a remote canyon in Larimer County, a small cushion-shaped plant with bright yellow flowers has been introduced to Denver Botanic Gardens by yet another conservation organization in the Gardens' role as a conservator for the Center for Plant Conservation.

Seeds of the globally rare *Aletes humilis*, Larimer parsley, collected by personnel of the Colorado chapter of The Nature Conservancy, have been sown at the Gardens' York Street site. Only five populations of this soft, saw-toothed leaved plant are known, all of them in an area northwest of Fort Collins. The seeds were produced by plants growing on the Conservancy's Phantom Canyon Ranch.

Once germinated, and after an infancy in the Gardens' greenhouses, some of the resulting plants will be returned to the ranch and placed on display at the new nature center being built there. Others will join the endangered species being grown at the Gardens for seed production and

further study. Some may be planted in a special endangered species garden under consideration for 1005 York Street.

The Nature Conservancy is an international membership organization committed to global preservation of biological diversity. Its mission is to find, protect and maintain the best examples of communities, ecosystems and endangered species in the natural world. Their purchase of Phantom Canyon Ranch has preserved an area of Colorado rich in interesting plants, animals and geological features.

With this cooperative effort on behalf of *Aletes humilis*, The Nature Conservancy joins the Colorado Natural Areas Program, the U.S. Fish and Wildlife Service and the Bureau of Land Management as partners with Denver Botanic Gardens in its mission of identifying rare or endangered plant species or species of special concern.

Refer to your Spring/Summer issue of *The Green Thumb Magazine* for more about the Gardens' participation in the Center for Plant Conservation Program. Other information may be found in the Fall 1989 issue of TNC's Colorado chapter newsletter.

John Fielder
will be at DBG
November 9.

Down the Garden Paths in November

A beautiful patch of American prairie rolls toward the Rocky Mountains—right in the center of a city with a million and a half inhabitants. It's at the western end of Denver Botanic Gardens, between the Japanese Garden on the north and the Rock Alpine Garden on the south. In this month of two quintessentially American holidays, can you think of a more appropriate place to take a few moments to reflect on our nation's riches than in the Gardens' Laura Porter Smith Plains Garden? There you'll find an incredibly rich area of American plant life.

Down the garden paths in November.

Visiting in November you'll see interesting seed heads, colorful dried grasses and a prairie scene of unequaled serenity. It's backed by the mature foothills vegetation of the Gates montaine garden and the magnificent dark Colorado spruces of Cheesman Park. Is it significant that this garden of Colorado and American plants is outstanding this time of year, when the garden is at peace?

Since the Gardens opens to visitors on both Veterans Day and Thanksgiving Day, put the plains garden on your holiday agenda. This month is a beautiful time for members to bring guests to the Gardens. Share this American spot with someone.

National Pesticide Hotline

Nurseries and home gardeners seeking information about pesticides on either an emergency or informative basis should be familiar with the National Pesticide Telecommunication Network (NPTN). It is a toll-free "hotline" established and maintained by the Texas Tech University Health Sciences Center in Lubbock, Texas.

The network operates 24 hours a day, 365 days a year, and is available



to provide accurate and prompt responses to requests from the medical community as well as the general public. The operators will respond to requests for information on pesticide products and their formulation as well as information on recognition and management of pesticide poisoning and toxicology. They also provide referrals for laboratory analysis and investigation of pesticide incidents, emergency treatment information, health and environmental effects and clean-up and disposal procedures.

The key NPTN telephone personnel are pesticide specialists with agricultural, environmental and public health backgrounds. Inquiries are also answered by additional operators trained to provide and interpret information for callers. These operators are graduate students in the fields of biology, anatomy, biochemistry and entomology.

The National Pesticide Telecommunication Network number is 1-800-858-PEST (in other words, 1-800-858-7378).

(Excerpted from *Rose Window*, July 1989, with permission from Ms. Geraldine Boller, Editor.)

Buyer Beware

Teak, *Tectona grandis*, is the most popular hardwood imported into the United States. You will find it used in the form of "leisure" furniture, flooring and carved wood; it is also used in the ship-building industry. Indigenous to India, Burma, Thailand, Indochina and Java, raw teak logs are shipped to an intermediary country where they are processed into furniture components. Japan is a major importer of tropical hardwoods.

Teak is very slow growing, taking from 60 to 100 years to reach maturity. To perpetuate the supply and demand of teak, large plantations have and are being formed on land that was formerly tropical forest. There are a number of problems with these plantations. A teak plantation will never replace the diversity of life within the rainforest. Monocrop plantations are highly susceptible to disease and insect predators, and the required heavy use of pesticides in the plantations contaminates local water supplies, endangering the lives of local populations. Soil erosion is double that of virgin forest. Teak plantations displace native people from the best soils on which they would grow sustenance crops.

Less than 1 percent of the total world supply of tropical hardwood comes from a sustainably managed forest.

It is going to take major effort but here are some alternate ideas you can support locally.

1. Buy tropical wood products only from 100 percent sustainable concessionaires.
2. Avoid stores, including lumber yards, import shops and furniture stores, that carry tropical wood products.
3. Use temperate alternatives such as white oak, yellow southern pine, cedar or hickory in place of teak for durability.
4. Educate and urge friends to use the above guidelines.



CLASSES

Fall
1989
Denver Botanic Gardens



Winter Protection for Roses

(one session)

Saturday, December 2
10 a.m. to noon **Classroom A**

Learn how to prepare your roses for the winter before our Colorado dry winds and freezing temperatures arrive. There are a variety of techniques for protecting your favorite roses and we will cover them all, step-by-step, in this hands-on workshop. All rose groups will be covered including miniaturae, old garden shrub hybrid teas and climbers. Also, there will be time for questions on individual rose care.

Instructor: Melinda Campbell is a third generation Colorado rose grower. She started High Country Rosarium in 1981, and specializes in growing hardy, old garden, shrub and species roses.

Fee: \$8 members/\$9 non-members

Limit: 20

December and Those Winter Chores

(one session)

Tuesday, December 5
5:30 to 7:30 p.m. **Classroom C**

December, busy as it is with preparations for the holidays ahead, also is a month that requires a little time in the Gardens.

In this class students will learn about plants that will require mulching in December and January as well as what to use as a mulch. Other topics will cover salt damage to your lawns, storm damage to woody plants, their pruning requirements and more.

Instructor: Andrew Pierce is a horticulturist and is Acting Director of DBG. He is an accomplished grower of perennials and alpine plants.

Fee: \$8 members/\$9 non-members

Limit: 18



Holiday Houseplants

(one session)

Saturday, December 9
10 a.m. to noon **Classroom C**

Extend the lives of those beautiful plants you will receive during the holidays. You'll find that it is not difficult once you learn a few tricks.

One of the Gardens' most popular instructors will share tips on growing cyclamens, poinsettias, anemones, azaleas, mums and forcing bulbs. Advice will also be provided on maintaining Norfolk Island pines and other indoor Christmas trees.

You need only bring a pen and notebook for recording the many tips that will be shared, and a large paper bag to protect the miniature plant you will take home at the end of class.

Instructor: Larry Latta is botanist-horticulturist for public information at the Gardens. He has been an orchid hobbyist for over 15 years and is a popular DBG instructor.

Fee: \$13 members/\$14.50 non-members (includes \$5 for materials)

Limit: 25



10 A Victorian Christmas: Flowers and Fruit

(one session)

9:30 a.m. to 12:30 p.m.

Morrison Center at DBG

Section I: Saturday, December 2

Section II: Tuesday, December 5

Invoke a feeling of Christmas past in your home with Victorian floral opulence. Using flowers and fruits of the period, so appropriate for many Denver houses, you will create lavish arrangements.

In the first section, you will make a stunning centerpiece suitable for the grandest dining table, breakfront or mantel. In section two, you will create a spectacular swag that can be hung or draped over a fireplace archway or a staircase. You should bring scissors, a pastry brush or 1-inch flat paint brush, and a very large box in which to transport your finished project—a banana box from the market would work. All materials will be provided for a finished arrangement.

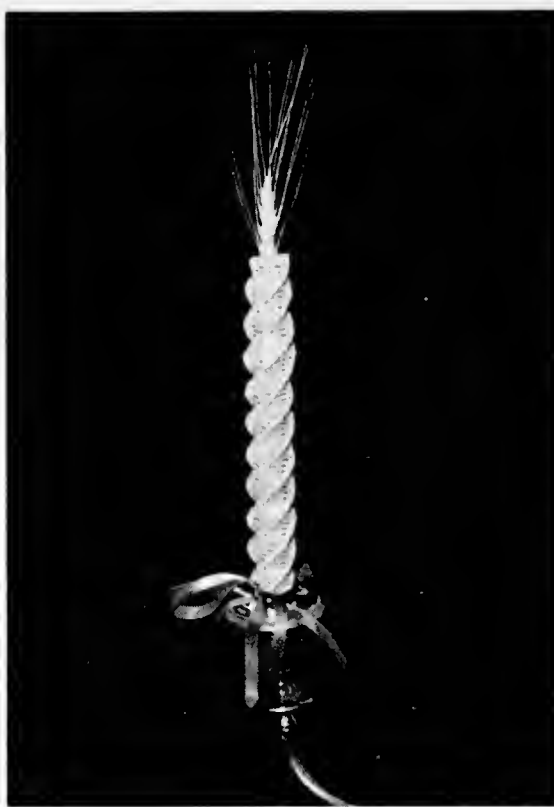
Students may attend one or both sections. If registering for both sections, indicate sections I and II on the class registration form.

Instructors: Angela Overy and Rob Proctor. This popular team is in demand for their entertaining lectures on growing and arranging old-fashioned flowers. Their floral designs will be featured in Mr. Proctor's upcoming antique flower book series, published by Harper and Roe.

Fees: \$37 members/\$40 non-members (includes \$25 for materials)
Registration in both sections will be \$74 for members and \$80 for non-members.

Limit: 30 students per section

Learn how to weave this candle in Maureen McGowan's class.



Spiral Weaving Workshop: Holiday Candles

(one session)

Sunday, December 3

1:00 to 4:00 p.m.

Classroom B

Expand your knowledge of wheat weaving and learn how to make a spiral woven candle for the dining table or mantel. Place it in your favorite candle holder and decorate it with ribbons and holiday ornaments.

Students must have some previous wheat weaving experience. However, a review of this technique will be provided. Students will first weave a candy cane.

Bring one of your favorite candle holders to class, along with a ruler and scissors.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$18 members/\$20 non-members (includes a \$6 materials fee)

Limit: 12

Floral Design Sweatshirt Art Workshop

(one session)

Saturday, December 2

Noon to 4 p.m.

Classroom B

Create a stylish sweatshirt or T-shirt through the use of acrylic paints and found objects and keep it for yourself or give as a gift during the holidays.

No previous art experience is necessary to design and paint these trendy shirts. Techniques can vary from realistic reproductions to free-form, impressionistic patterns. This instructor will focus on design through interpretation of natural forms. She will structure the class to meet varying levels of painting and drawing skills.

Each student will leave with a completed shirt and sufficient instructions to easily design future shirts at home. Emphasis will be placed on highly spirited designs and motivational demonstrations. Please bring no more than two T-shirts or sweatshirts, any size and any color; a large jar for water, a "hard" toothbrush and any paintbrushes you might feel like using. The instructor will provide acrylic paints and the found objects from her "junk box."

Students of all ages from 12 and up are encouraged to participate. A diverse range of ages helps to create a lot of inspiration and energy in design techniques.

Instructor: Marilyn Schmidt is an artist and fabric designer who is a Master Teacher at the Denver Art Museum. She has taught many popular "sweatshirt art" classes and has exhibited her work around the state.

Fee: \$21 members/\$24 non-members (includes \$5 for materials)

Limit: 12

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes, Field Trips and Lectures

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Member ID _____

(on top line of newsletter address label)

Address _____

City _____ ZIP code _____

Daytime Phone _____ Evening Phone _____



Gardening: Protecting Woody Plants

Relax. There are very few things that you **have** to do in your garden in November.

However, young trees should be bundled up for the winter — not against the cold, but against the heat. Our winter sunshine is so strong and our nights so cold that the southwest side of the tree trunks are subjected to severe fluctuations in temperature. As a result the cambium dies and the bark dries and splits. This dead spot severely interrupts the flow of water in the tree and exposes the interior to attack by insects and diseases. If you have young trees with thin, smooth barks, whose trunks are less than five inches in diameter, you

should wrap the trunks against the winter sun and its heat.

Burlap is an acceptable covering, but you can also purchase special tree-wrap material of Kraft paper. This is tough and water repellent. It comes in handy rolls that facilitate wrapping it around the trunks. Begin by tying the ribbon of paper (it's not impossible) or stapling it (this is safe for the tree and is much easier than tying) near the ground and continue by wrapping it in an overlapping spiral upward to the first crotch. Secure it again at the top.

Other winter damage you can prevent this month is wind injury to clematis, climbing roses, honeysuckles and other woody vines. Over the growing season their stems have likely reached well beyond their ties. Winter winds will flail them against each other and their trellises, breaking and bruising them.

It's time to snug them up to their supporting structures again. Don't, however, raise the green canes of climbing roses upward. The closer to the ground they remain through the winter, the less likely they'll suffer winter kill. In fact, whenever possible, you should free them from their anchors and spread them over the ground. Secured there they can be covered with straw or other loose mulch, which will protect them from both the hot sun and cold, drying winds.

Of course, from now through March is pruning season. If the weather is uncooperative, however, you can leave your clippers and saws in the garage this month except to perform minor surgery on groundcovers and shrubs that will be in the way when the heavy snowfalls arrive. Neatly edged walkways will make your snow shoveling easier, and those branches that will soon be weighed down with snow forcing you to detour through the drifts, might as well be pruned out now, before they become a winter aggravation.

So, even though the gardening advice for November might be "take it easy," you do have a few chores that will make the coming season more pleasant. You'll feel the satisfaction that comes with knowing your garden is ready for the winter, when you'll be appreciating it, as often as not, through your windows.

Larry Latta is the botanist-horticulturist for public information at DBG.

Dedication at Chatfield Arboretum

Since the dedication of the Polly Steele Nature Center by former DBG director Merle Moore in September, Chatfield Arboretum has been buzzing with fall family fun. Mr. Moore noted in his dedication that over the past 14 years "a great deal of planning and behind-the-scenes work has been quietly going on."

Dedicated to the memory of Mary Pauline (Polly) Steele, this center houses educational displays commemorating her love of nature and the Gardens. In addition, the Dora and Pauline Roberts Riparian trail was dedicated, in their memory, "to nature lovers of all ages."

Watch future issues of your newsletter for announcements of upcoming events at Chatfield Arboretum. If you would like to volunteer or just want more information call 973-3705.

Prepare now for winter.

CALENDARNOV

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
	<i>*First meeting of a class with more than one session</i>			1 Tempel Wildflower Lecture	2	3 Botanical Treasures IV	4 Botanical Treasures IV, Ornaments from Straw and Wheat
	5 Botanical Treasures IV	6	7	8	9 "Colorado—Lost Places and Forgotten Words"	10	11 Gloxinia Gesneriad Growers Sale
	12 Gloxinia Gesneriad Growers Sale	13	14 Bonfils-Stanton Lecture	15	16	17 Holiday Sale	18 Holiday Sale
	19	20	21 Day of Discovery	22	23 Thanksgiving—Gardens is open	24	25
	26	27	28	29	30		
	Coming Next Month		December 2 & 5 A Victorian Christmas: Flowers and Fruit	December 5-30 "A World of Trains"	December 9 & 16 Teddy Bear Teas	December 25 Christmas—the Gardens is closed	
	December 1-2 Quilt Show and Sale	December 2 Floral Design Sweatshirt Art Workshop, Winter Protection for Roses	December 5 December and Those Winter Chores	December 8 Herald the Season	December 10 & 17 High Teas	December 26-30 Extended Evening Hours	
				December 9 Holiday Houseplants	December 13 & 20 Gore Range Brass Quintet		

Denver Botanic Gardens, Inc.
 909 York Street
 Denver, Colorado 80206
 303-331-4000

Address correction requested

TIME VALUE
 November 1989



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Flowers from the Royal Gardens of Kew

Denver Botanic Gardens has been chosen as one of the few stops on a once-in-a-lifetime tour of the United States by a renowned collection of original botanical illustrations.

"Flowers from the Royal Gardens of Kew" presents 200 years of dazzling watercolor drawings, engravings and lithographs created to be published in the beautiful *Botanical Magazine* that, begun by William Curtis in 1787 and known familiarly in later years simply as *Curtis's*, has recently been taken over by Kew Gardens. It's now called *Kew Magazine* and the tour of this exhibition was arranged to celebrate the magazine's stature as the only color-illustrated periodical in the world to be published continuously for two centuries.

The exhibition, in John C. Mitchell II Hall, offers a rare look at the original illustrations for this influential periodical that has provided for many—scientist and layman alike—their first encounter with newly discovered plants entering the botanical and horticultural scenes. At Denver Botanic Gardens the show will be enhanced by the display of issues of Curtis's magazine and historically important—and beautiful—books in the Gardens' collection in the Waring Rare Book Room in the Helen Fowler Library.

"Flowers From the Royal Gardens of Kew" will be at the Gardens January 13 through February 4, 1990.

One event scheduled to complement this exhibit is "Botanical Illustration Workshop: A Day with William Curtis." Information on this workshop to be taught by Rob Proctor and Angela Overy will be found in the education section of this newsletter.

You'll want to reserve a date on your new year's calendar for this rewardingly rich and varied sampling of the works of some of the world's most brilliant botanical illustrators. The January *Green Thumb News* will have more information to add to your enjoyment of this exhibit.

Blossoms of Light

You will be delighted to watch the trains this holiday at the Gardens: "Wonder World of Trains" is this year's theme for "Blossoms of Light." It will send charming model trains running through John C. Mitchell II Hall and the lobby court display.

The outdoor lighting display includes various new additions this year that are both whimsical and festive. These new lights are a foretaste of expansions planned for coming years.

December's activities begin with the Quilt Show and Sale on December 1
continued on page 2

Green Thumb

NEWS

Denver Botanic Gardens
December 1989
Number 89-12

Happy Holidays

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page 5



Tulipa kushkensis by Lillian Snelling, 1931, from "Flowers from the Royal Gardens of Kew."

2 Blossoms of Light

continued from page 1

and 2. Last year's show was so popular that an extra day has been added. Traditional and modern quilts will be featured. Quilts have become one of today's treasured collectibles and decorator items. This is your opportunity to get that special gift for a certain someone on your holiday shopping list.

High teas will be served Sundays, at 2:00, 3:30 and 5:00, December 10 and 17, in John C. Mitchell II Hall. What a wonderful way to end a hectic holiday week, relaxing and enjoying a fine English custom. The traditional high tea menu will offer Devon cream and finger sandwiches.

Children are invited to experience the high tea tradition at the Teddy Bear Teas, Saturdays, December 9 and 16, at 2 and 4 p.m. They are encouraged to bring a teddy bear or favorite doll. Teddy Bear Teas will feature a modified high tea menu and entertainment by Judie Pankratz and her marionettes.

In the past, all teas have been sold out, so make your reservations now. Send payment of \$8 per child and \$15 per adult, with your first and second choices of day and time, to Marty Nemecek, 3101 E. Long Road, Littleton, CO 80121.

The Gore Range Brass will fill John C. Mitchell II Hall with holiday music Wednesdays, December 13 and 20, from 7 to 9 p.m. Please note the extended hours for these two evening performances and enjoy the light displays on the outside grounds.

In order to give everyone a chance to enjoy the holiday display of lights, the Gardens will be open evenings until 8 p.m. December 26 to 30.

Escape to your Gardens this December. It would be a shame to miss any of the new displays and activities. Clip out this handy schedule and keep it in a visible location at home.

Snowy scenes in December contribute to the holiday mood. Visit in December.



"Blossoms of Light" Calendar

December 3-30	Wonder World of Trains
December 1 and 2	Quilt Show and Sale
December 9 and 16	Teddy Bear Teas
December 10 and 17	High Teas
December 13 and 20	Holiday Music: Gore Range Brass
December 25	Merry Christmas—Gardens is closed
December 26 to 30	Open evenings until 8 p.m.

Tributes

In memory of Jeanette Cohen
E. Sydney Glick

In memory of Herbert Crane
Mr. & Mrs. Robert S. Appel

In memory of Maxine Ford Foreman
Associates of DBG
Betty & Erik Bonde
Edwin R. Helwig
Phyllis & Sam Shushan

In memory of Donna Lee Huitt
Steve, Jean, Erika & Rachel Holt

In memory of Mrs. Iturreria
Lisa Solomon

In memory of Ellie Loeb
Mr. & Mrs. Robert S. Appel

In memory of Roberta McDougall
Forest Oil Company

In memory of Gladys Padgett
The Staff of the Governor's Office

In memory of Charles "Speedy" Reed
Anna & Tom Cassidy

In memory of Mrs. Joyce Wehrman
Denver Saturday Dinner Club

In memory of Mrs. J. Churchill (Peg) Owen

Restricted to the Alice Mann Owen Internship Fund In Applied Horticulture

Mr. & Mrs. Thomas F. Bradley
John & Ann Chafee
Gus & Elaine Cladis
Nea Brown & David Harman
George & Ruth Hopfenbeck
Mr. & Mrs. Joseph W. Morrissey, Jr.
Amy W. Owen
Mrs. A.D. Talmage
Jean & Nelson Wareheim

Herald the Season

The annual party for members and their children and grandchildren, called "Herald the Season," will take place Friday evening, December 8. The announcement was in the November *Green Thumb News*.

If you have not sent in your reservation, it is due by December 1. However, space is limited so please call the membership office, 331-4000 Ext. 22, to see if additional reservations are being accepted.

Admission tickets are being mailed as soon as they're being received.

Did You Know?

Numerous chemicals essential to the health of humans comes from tropical rainforests. However, fewer than one percent of the plant species have been chemically analyzed.

Green Thumb News Number 89-12 December 1989

Published monthly by the Denver Botanic Gardens education department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the membership department at the above address or call 331-4000.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than November 20 for January, December 20 for February and January 19 for March.

Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editors. Please call the education department at 331-4000, Ext. 20, for details.



Summer Internship in Applied Horticulture

If you know a college student who would be interested in gaining work experience in the field of horticulture, encourage them to write to Denver Botanic Gardens for information on our summer intern program. This program begins June 11, 1990, and ends August 17. A taxable stipend of \$2,000 will be paid to each intern for the ten-week term.

Designed to be a practical work-learning experience for college students, it provides the opportunity to work with our professional staff and volunteers who are involved in the daily operation of a display garden. This is experience not normally obtained in the classroom environment.



The program includes planting, watering, pruning and weeding on the outside grounds; seeding, transplanting and propagation in the greenhouses; tropical and subtropical plant display maintenance; plus classes, field trips, lectures and demonstrations.

To qualify for this 1990 Summer Internship in Applied Horticulture, applicants must have completed their sophomore year of college with a grade point average of at least 2.5 on a scale of 4.0 and must be currently enrolled as either an undergraduate or a graduate student. Several introductory courses in botany and horticulture are prerequisites. All applications are due March 1, 1990; notification of appointment will be mailed by March 15. Forms and additional information can be obtained by writing:

Patricia A. Pachuta
Education Director
Denver Botanic Gardens
909 York Street
Denver, CO 80206

Kai Kawahara Recognized for Community Service

On September 30 this year, members of the Denver metropolitan Japanese-American community hosted the "Kansha no Hi" or Day of Appreciation, to honor special individuals for their generosity in community service. Denver Botanic Gardens is proud that Kai Kawahara, who cares for the Japanese Garden (Shofu-en), has been honored for his volunteer time and wonderful talents. The following article about Mr. Kawahara has been excerpted from the September publication of *Kansha no Hi*.

"Kai Kawahara was born in Vallejo, California, in 1920. When he was four, he was sent to Japan to be educated. There, he completed elementary and secondary schools, and two years at an agricultural college. In 1937, Mr. Kawahara returned to the U.S., worked on a farm in Guadaloupe, California, and learned English by attending night school. In 1942, he evacuated voluntarily to Denver where he worked in the hotel business and later as a grocer. Currently, Mr. Kawahara maintains the Japanese Garden at Denver Botanic Gardens.

"Bonsai has been Mr. Kawahara's lifelong interest. He started learning bonsai when he was ten and currently holds a certificate from Japan as a

master teacher of bonsai and landscape gardening. In 1958, Mr. Kawahara began teaching members of the newly-formed Denver Bonsai Club; he was then one of the few people in the area that knew anything about bonsai. Mr. Kawahara still teaches at this club and at the Rocky Mountain Bonsai Club. He also supervises annual bonsai exhibits at the Denver Buddhist Temple, the Simpson Church, and Denver Botanic Gardens, and demonstrates bonsai at Denver Botanic Gardens and at the Denver Center for the Performing Arts.

"In 1989, Mr. Kawahara was sent by Denver Botanic Gardens to examine specialized bonsai techniques. There, he was invited to visit the Imperial Gardens, a rare honor for foreigners.

"A modest and unassuming person, Mr. Kawahara does not accept money for his teachings. He has also had numerous business offers in bonsai, but turned them down, saying that he considers bonsai a hobby, and that he teaches for pleasure and community benefit. In addition to his bonsai, Mr. Kawahara is a member of the Denver Buddhist Temple and *Seicho no Iye*."

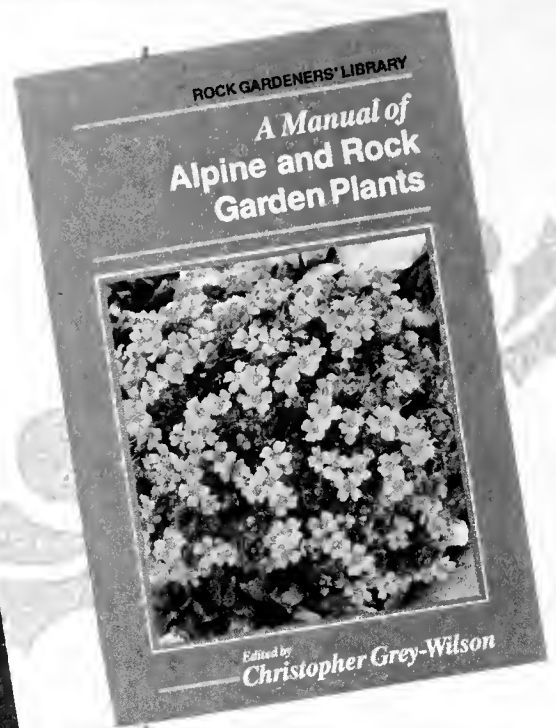
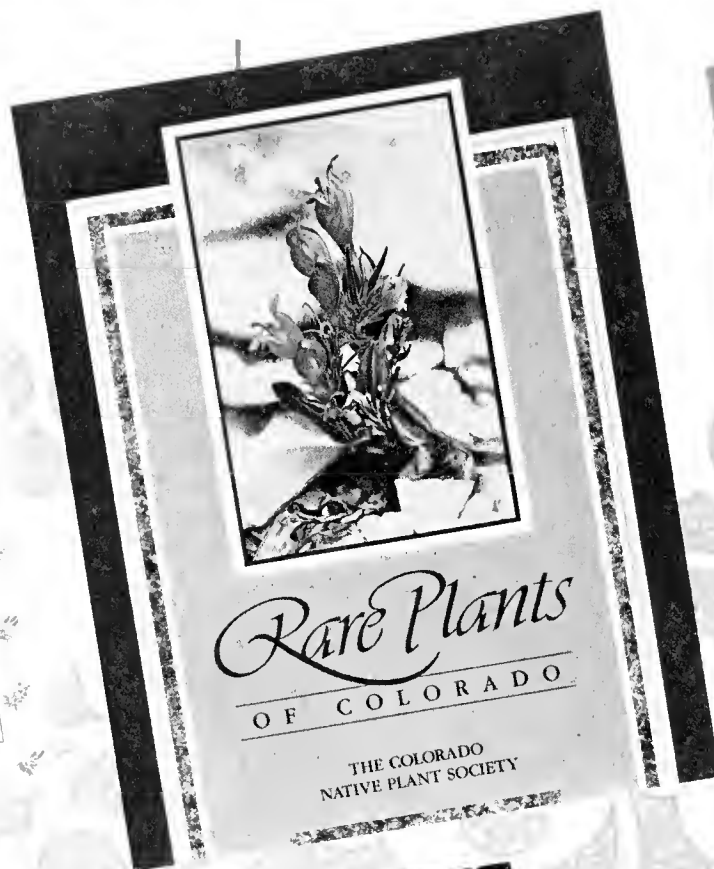
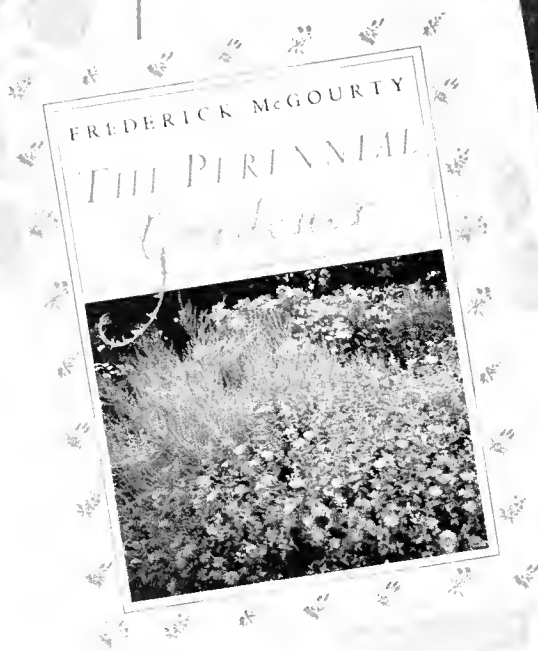
Congratulations to Mr. Kawahara for this noble recognition, as well as to express sincere appreciation for nearly ten years of dedicated work in Shofu-en.

(Excerpt from *Kansha no Hi* with permission from Kenzo Fujimori, editor.)

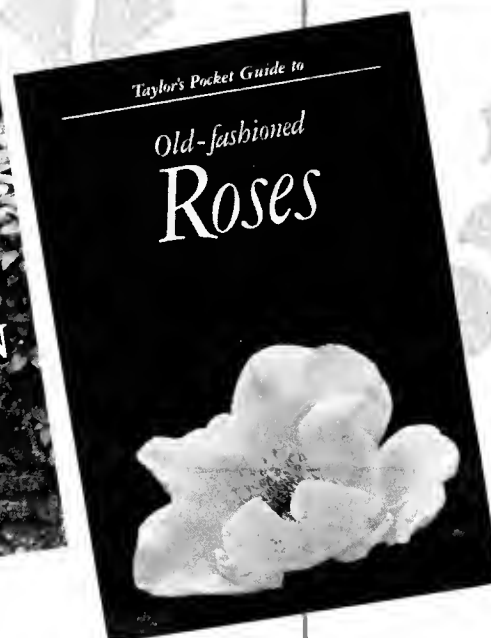
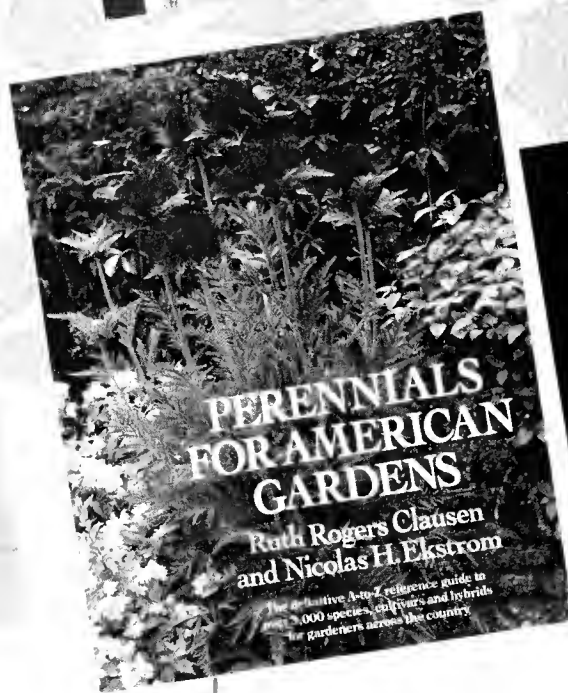
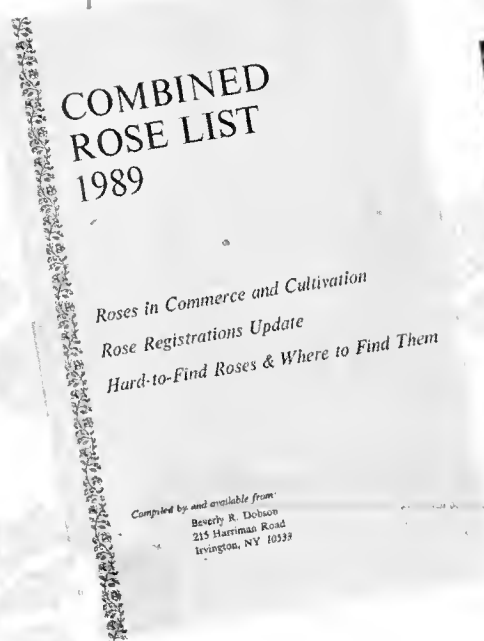


Summer interns work on the grounds and attend field trips to Colorado's various plant communities.

Kai Kawahara is "number one bonsai" in Denver.



Gift Ideas from Your Gardens



Holiday Suggestions from Our Librarian

This year has provided gardeners with a feast of gardening books. As in any broad offering of staples and delicacies, my choices will be subjective, but I will keep in mind that the readers are not all looking for the same qualifications. This review of 1989 gardening literature is limited to the 1989 accessions.

Our feast should start with an appetizer. Roger Swain's *The Practical Gardener* presents an overview of practical gardening with good, sound advice applicable to our area.

Approaching the table of individual delights, you can find three titles on roses. Renewed interest in the cultivation of old roses has prompted Thomas Christopher to write *In Search of Lost Roses*; Jane Fearnly-Whittingstall, *Rose Gardens: Their History and Design*; and Maggie Oster to serve as consulting editor for *Taylor's Guide to Old Fashioned Roses*. For finding the roses that the authors have presented in their well-illustrated works, Beverly R. Dobson's annual *Combined Rose List* can be consulted.

To devotees of rock gardening, the renowned British author Graham Stuart Thomas offers his advice in *The Rock Garden and Its Plants*. From the history of rock gardening to the restoration of neglected gardens, Mr. Thomas states his plant choices for particular areas within the rock garden. Achieving the desired effect in what Mr. Thomas insists is a gardening art form will keep the most devoted gardener totally absorbed, both mentally and physically, for a lifetime.

A Manual of Alpine and Rock Garden Plants, edited by Christopher Grey-Wilson, presents the information of many contributors in a dictionary format; the cultural details include size, time of flowering and soil and light requirements. Botanical information gives family, place of origin, altitude and general description.

The popularity of the perennial border has elicited several authors to consolidate their knowledge in book form. Reviewed in the October issue

of the *Green Thumb News*, *Perennials for American Gardens* by Ruth Rogers Clausen and Nicolas H. Ekstrom, proved a very thorough presentation. Fred McGourty's entry is *The Perennial Gardener*, completely different from the previous title in its format, but it also covers the essentials of perennial gardening quite capably.

Of great importance in 1989, is the long-awaited *Rare Plants of Colorado* by the Colorado Native Plant Society. This is not a gardening book. All of us who live in this beautiful state should be aware of our native plants. They can be used in beautifying our private gardens and make us more aware of those native plants that need protection against the threat of extinction.

A final addition to this list is *Personal Landscapes* by Jerome Malitz, a professor of mathematics at the University of Colorado, Boulder. A recent publication from Timber Press, this volume presents beautiful photographs of local and national gardens. Upon reading this book, you will be inspired to design outdoor living spaces that conform to your personal needs.

Solange Gignac
Helen Fowler Librarian

Double Your Gift to the Gardens

Do you know if your company has a matching gift program? If yes, you may double or triple your gift to the Gardens. Check with your personnel office!

The following is a partial list of companies that have matching gift programs. Send in their completed matching gift form.

AT&T
American Brands, Inc.
American Express Co.
Armco, Inc.
Atlantic Richfield Co.
Avon Products, Inc.
Brown Group, Inc.
Brunswick Corp.
Butler Manufacturing Co.
CBS Inc.
Caterpillar Inc.
Chemical Bank
Chevron Corp.
Chubb Life Ins. Co. of America
Chubb & Son, Inc.
Citicorp/Citibank
The Coca-Cola Co.
Deluxe Check Printers, Inc.
Digital Equipment Corp.
Dow Corning Corp.
Equitable Life Assurance Society
of the United States
Exxon Corp.
Fireman's Fund Insurance Co.
Fluor Corp.
Gannett Foundation
General Cinema Corp.
Gulf + Western Inc.
International Business Machines
Johnson & Higgins
Kmart Corp.

Koppers Co., Inc.
Martin Marietta Corp.
The May Dept. Stores Co.
McDonald's Corp.
McGraw-Hill, Inc.
Mobil Oil Corp.
Monsanto Co.
Montgomery Ward & Co.
MONY Financial Services
Mutual of America
NCR Corp.
R.J.R. Nabisco, Inc.
PPG Industries, Inc.
PepsiCo, Inc.
Philip Morris Companies, Inc.
Ralston Purina Co.
Security Pacific Corp.
Stanadyne, Inc.
The Standard Oil Co.
State Mutual Life Assurance Co.
of America
TRW Inc.
Time Inc.
Times Mirror
Transamerica Corp.
The Travelers Corp.
US West, Inc.
Union Pacific Corp.
United Bank of Denver
United Parcel Service
Westinghouse Electric Corp.

Give a Gift Membership

The perfect last-minute gift, as well as the ideal gift for your gardening friends, is a Denver Botanic Gardens membership.

A caring gift, it allows you to share your love of the Gardens with family and friends throughout the year. Members receive this monthly newsletter offering discounts on plant-related classes and timely horticultural information. Additionally, a

library of horticultural books and magazines, exciting special events and members-only activities are benefits you will be providing with a gift membership.

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens. With memberships in various categories, you can easily find one that fits all your needs. Complete the adjacent coupon, return it to the gardens and we'll do the rest.

Holiday Gift Membership Form

Donor's Name _____
Address _____
City _____ State _____ ZIP code _____
Phone _____

Recipient's Name _____
Address _____
City _____ State _____ ZIP code _____
Phone _____

Date to mail gift card _____

Gift card to be signed _____

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens. Mail to Denver Botanic Gardens, 909 York Street, Denver, CO 80206. For additional details call 331-4000, Ext. 22.

\$35 Family/Dual (two adults)
\$25 Individual
\$25 Senior Couple
(both over 65, same address)
\$18 Senior (65 and over)
\$18 Full-time Student

☐ Cash ☐ Check
☐ VISA ☐ MC

Exp. _____

Signature _____



Be sure to search the Gift Shop for holiday gift ideas.



Winter
1989

Denver Botanic Gardens

CLASSES

Bouquet of Garden Books

(one session)

Saturday, January 13

10:00 to 11:30 a.m.

Helen Fowler Library

Learn how to use the Helen Fowler Library's collection of books on landscape architecture and landscape design. This knowledge, plus learning how to use the seed and nursery catalogues, will enable you to use the library and its resources for planning and planting in 1990 and years to come.

Instructor: Solange Gignac is the librarian for the Helen Fowler Library. She is also a respected and knowledgeable rock gardener.

Fee: \$6 members/\$8 non-members

Limit: 20



An Aquatic Pond of Dreams: Ours and Yours

(three sessions)

Thursdays, January 18,
February 15,
March 15

7:30 to 8:30 p.m. Classroom C

The focus of this class will be on the history of water gardening at the Gardens while providing some insight into your present and future aquatic gardens. Denver Botanic Gardens has encouraged a garden revolution that has spread across the country. On three separate evenings this winter eight years of "water gardening madness" will be relived.

Session I: A Pond of Dreams Thursday, January 18

The dream has included tropical and hardy water lilies, bog plants, and the elegant Victoria water lily. Some vivid highlights of the development of water gardening at the Gardens will cover the formation of the Colorado Water Garden Society, the International Water Lily Symposium of 1987 and the 1989 display on the 16th Street Mall. Additionally, you'll learn about some conservation measures that are being attempted with this collection.

Session II: The Victoria Water Lily Thursday, February 15

With leaves five feet in diameter and massive pineapple-scented blooms, the giant water-platter of the Amazon is one of the wonders of the plant world. It can be grown in Denver. It awed visitors of 16th Street Mall last summer. Annually on display at the Gardens, it is frequently the center of attention. Learn how to grow this exciting plant.

Session III: The Barrel Garden— Your First Water Garden

Thursday, March 15

A rustic oak barrel is an excellent choice for your first water garden. A water lily, an emergent (bog plant) or two, an oxygenating plant and even a carnivorous plant can be combined to create an intriguing miniature water garden. Children, as well as adults, will enjoy this fun garden. Handouts will be provided as well as information about proper selection and care of plants.

Instructor: Joseph V. Tomocik is a gardener/florist at DBG and has been responsible for maintaining DBG water gardens since 1982. He has lectured at DBG, Longwood Gardens, and Missouri Botanical Gardens.

Fee: \$12 members/\$14 non-members



Room With A Garden— The Living Collection

(four sessions)

Tuesdays, January 16, 23, 30
February 6

7:00 to 9:00 p.m. Classroom A

Tall plants, small plants, fuzzy plants, shiny plants—interior gardens are full of these collectibles. Houseplants provide year-long gardens and year-long pleasures. They continue to give in spite of the fickleness of Colorado's weather.

In this four-week class, the instructor will address the techniques of growing houseplants. Novice and advanced growers will learn how to decorate with plants as well as how to locate happy homes for them and what the plants require (the basics).

Each session will be divided into two parts. Part One will cover specific areas of care, while Part Two will emphasize plant selections for various areas of your home. Topics will include watering, fertilizing, soils and pests as well as bright-light, full-sun, patio and hanging plants.

Learn basic but professional techniques.

Instructor: Louise Riverso is a professional interior plantscape designer. She operates Plantings, a garden and interior plant service company. She designed and installed a feature garden at the 1989 Colorado Garden and Home Show. Additionally, Ms. Riverso has taught beginning interior plant-scaping classes, previously at Academy of Floral Design and currently at the Design, Floral and Horticultural School in Denver.

Fee: \$32 members/\$35 non-members

Limit: 20

Interior Environments— Plant Selections For You

(six sessions)

Thursdays, January 18, 25

February 1, 8, 15, 22

7:00 to 9:00 p.m. Classroom A

Make every room a garden. A graceful palm, a victorian fern, a southwestern cactus or a hanging rhipsalis will create a special atmosphere in the appropriate location. Yet, every location is not appropriate for every plant.

In this class emphasis will be placed on specific plants and family characteristics. Each plant will be discussed in detail with growing tips. Guidelines will be provided for future purchases. Learn how to locate a healthy, pest-free plant and how to select the right plant for the right site.

This comprehensive class will cover cacti, euphorbias, palms, ferns, dracaenas, begonias and it will help you develop your own "how-to" reference guide.

Instructor: Louise Riverso

Fee: \$48 members/\$53 non-members

Limit: 20



Botany for Beginners

(five sessions)

Saturdays, January 20, 27

February 3, 10, 17

9:30 to 11:30 a.m. Classroom A

This course will provide a brief but thorough introduction for those who wish to know more scientific information about plants: their structure, how they grow, basic physiology, how to give them what they need, and something about plant ecology. Previously offered in four sessions, it will now be extended to five so there will be more opportunity for questions and general discussion.

Living plant materials and microscope slides will be used, as well as an illustrated syllabus to serve as a visual and hands-on aids.

Instructor: Moras L. Shubert, Ph.D. is Professor Emeritus of Botany, at the University of Denver, with over 35 years of teaching experience.

Fee: \$40 members/\$44 non-members

Limit: 20



How to Train Your Grapevine

(one session)

Saturday, February 10 (February 17 in case of bad weather.)

Noon to 2:00 p.m.

Herb Garden Grape Arbor

Can you train an old vine? How do you prune grapevines? What is a bull cane and can you prune your vines in their first year? In this hands-on workshop, students will learn the techniques of pruning their grapevines. They can, after receiving directions from the instructor, apply the techniques. Each student will have an opportunity to prune the vines in the DBG Herb Garden.

Participants should bring their (sharp) pruning shears, gloves and warm clothing. And yes, you can teach an old vine new tricks!

Instructor: Moras L. Shubert

Fee: \$16 members/\$18 non-members

Limit: 20



Mainly for Men: A Valentine's Eve Special

(one session)

Tuesday, February 13

7:00 to 9:00 p.m. Classroom B

Join a new Denver tradition. Make the special person in your life a wonderful nosegay of fresh flowers, including roses and ribbon, all arranged by **you** in a special holder, boxed and tied, ready for giving on Valentine's Day. All flowers and materials are provided, and careful instruction will be included so even the most inexperienced will have instant success! Join a host of other men for a repeat of last year's class, back by popular demand.

Instructors: Rob Proctor and Angela Overy demonstrate flower arranging throughout Colorado. Their informal style and commitment to the success of each participant make their classes perennially popular.

Fee: \$26 members/\$29 non-members



Watercolor Painting

(five sessions)

Wednesdays, January 10, 17, 24, 31 and February 7

Section I: 9:30 a.m. to 12:30 p.m.

Section II: 6:30 to 9:30 p.m.

Classroom B

Explore the sparkle and delicacy of watercolor painting while enjoying the natural setting of Denver Botanic Gardens. This course will cover the basic materials and techniques of

watercolors with emphasis on freedom of personal expression.

Come prepared with supplies. You'll need: a one-inch flat brush, #10 round brush, watercolor paper, tissues, container for water, plastic palette and cake or tube watercolors.

Instructor: Boris Shoshensky currently teaches art history, watercolor painting and oil painting at Rocky Mountain College of Art and Design, and he displays his work at Inkfish Art Gallery. He is a graduate of the University of Kharkov and the Art College of Kharkov, U.S.S.R. (Mr. Shoshensky will be instructing watercolors during Lynette Swanson-O'Kane's absence during the early part of 1990.)

Fee: \$60 members/\$66 non-members

Limit: 12



Botanical Illustration Workshop: A Day with William Curtis

(one session)

Tuesday, January 30

10:00 a.m. to 3:00 p.m. Classroom B

Spend a day among the works of English botanist and superb illustrator William Curtis. While taking a special tour of the exhibit "Flowers from the Royal Gardens of Kew" learn more about William Curtis and the wonderful age of elegance and reason he lived in. Learn about the process of engraving and hand coloring practiced at this time so you can take a new look at old engravings you may have or admire.

Then enjoy a delicious box lunch from Le Petite Gourmet in the warm, tropical conservatory of the Gardens. Finally, adjourn to Classroom B to learn how to draw a flower in the manner of the master, William Curtis. Beginners will gain a new appreciation of botanical illustration by spending an afternoon drawing. Please bring pencils, an eraser and a set of colored pencils if you have them. Paper will be supplied.

Instructors: Rob Proctor and Angela Overy have been the devotees of 18th century prints and engravings for many years. Angela's knowledge of life in 18th century England when Curtis grew up, combined with Rob's expertise as a botanical illustrator, promises a fascinating day for all artists and admirers of botanical illustration.

Fee: \$30 members/\$33 non-members (includes \$9.50 for lunch and drawing paper)



Great gift idea for artistic family members!

Draw a Diary of Colorado's Native Plants

(12 sessions)

Third Thursday of Each Month in 1990, Beginning January 18

9:30 a.m. to 3:30 p.m. Classroom B

One day each month, to capture the essence of each season, you will make a botanical drawing of a group of Colorado native plants. Winter sessions will be held at Denver Botanic Gardens and summer classes will be held in outdoors in the foothills and mountains. You will pick specimens, where permitted, and create an accurate, life-size, full-color drawing of appropriate flowers, seeds, berries, roots, leaves and grasses. By December you will have 12 complete plant studies and a heightened awareness and delight in some of Colorado's flora.

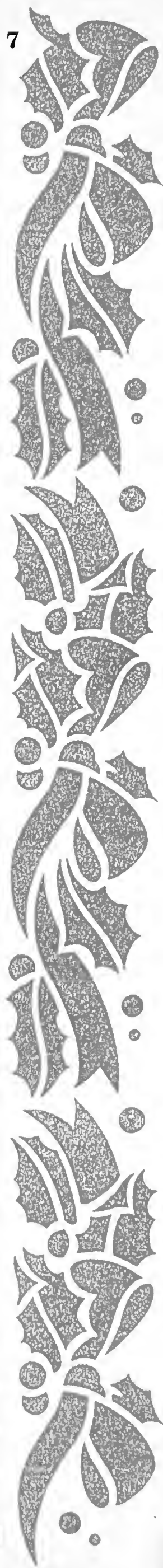
You should make a commitment to attend each month in order to have the satisfaction of a complete set of calendar illustrations. Although beginners would enjoy this class, it appeals particularly to those who have had some drawing instruction and want to dig deeper into the details of drawing Colorado plant life.

Classes will be held the third Thursday each month, starting Thursday, January 18, at Denver Botanic Gardens in Classroom B (continuing February 15, March 15, April 19 and May 17, at Denver Botanic Gardens; June 21, July 19, August 16 and September 20 at outdoor locations; October 18, November 15 and December 13 back at the Gardens in Classroom B). Students should bring to each class drawing pencils, a set of colored pencils, eraser, watercolors if desired, and a sack lunch, thermos, etc.

Instructor: Angela Overy has been teaching botanical illustration at Denver Botanic Gardens for over 10 years. In her classes even students who have not had drawing before quickly learn how to observe carefully and to make beautiful, accurate drawings of flowers in the disciplined manner of the 18th century botanists.

Fee: \$246 members/\$270 non-members (includes \$6 for materials) *Volunteers who wish to use their hours toward registration on this class need only pay \$150.*

Limit: 20



Winter Protection for Roses

(one session)

Saturday, December 2
10 a.m. to noon **Classroom A**

Learn how to prepare your roses for the winter before our Colorado dry winds and freezing temperatures arrive. There are a variety of techniques for protecting your favorite roses and we will cover them all, step-by-step, in this hands-on workshop. All rose groups will be covered including miniaturae, old garden shrub hybrid teas and climbers. Also, there will be time for questions on individual rose care.

Instructor: Melinda Campbell is a third generation Colorado rose grower. She started High Country Rosarium in 1981, and specializes in growing hardy, old garden, shrub and species roses.

Fee: \$8 members/\$9 non-members

Limit: 20



Spiral Weaving Workshop: Holiday Candles

(one session)

Sunday, December 3
1:00 to 4:00 p.m.
Classroom B

Expand your knowledge of wheat weaving and learn how to make a spiral woven candle for the dining table or mantel. Place it in your favorite candle holder and decorate it with ribbons and holiday ornaments.

Students must have some previous wheat weaving experience. However, a review of this technique will be provided. Students will first weave a candy cane.

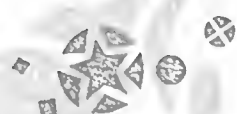
Bring one of your favorite candle holders to class, along with a ruler and scissors.

Instructor: Maureen McGowan is a

horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$18 members/\$20 non-members (includes a \$6 materials fee)

Limit: 12



December and Those Winter Chores

(one session)

Tuesday, December 5
5:30 to 7:30 p.m. **Classroom C**

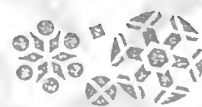
December, busy as it is with preparations for the holidays ahead, also is a month that requires a little time in the Gardens.

In this class students will learn about plants that will require mulching in December and January as well as what to use as a mulch. Other topics will cover salt damage to your lawns, storm damage to woody plants, their pruning requirements and more.

Instructor: Andrew Pierce is a horticulturist and is Acting Director of DBG. He is an accomplished grower of perennials and alpine plants.

Fee: \$8 members/\$9 non-members

Limit: 18



A Victorian Christmas: Flowers and Fruit

(one session)

9:30 a.m. to 12:30 p.m.
Morrison Center at DBG
Section I: Saturday, December 2
Section II: Tuesday, December 5

Invoke a feeling of Christmas past in your home with Victorian floral opulence. Using flowers and fruits of the period, so appropriate for many Denver houses, you will create lavish arrangements.

In the first section, you will make a stunning centerpiece suitable for the grandest dining table, breakfront or mantel. In section two, you will create a spectacular swag that can be hung or draped over a fireplace archway or a staircase. You should bring scissors, a pastry brush or 1-inch flat paint brush, and a very large box in which to transport your finished project—a banana box from the market would work. All materials will be provided for a finished arrangement.

Instructors: Angela Overy and Rob Proctor.

Fees: \$37 members/\$40 non-members (includes \$25 for materials) Registration in both sections will be \$74 for members and \$80 for non-members.

Limit: 30 students per section



Holiday Houseplants

(one session)

Saturday, December 9
10 a.m. to noon **Classroom C**

Extend the lives of those beautiful plants you will receive during the holidays.

One of the Gardens' most popular instructors will share tips on growing cyclamens, poinsettias, anemones, azaleas, mums and forcing bulbs. Advice will also be provided on maintaining Norfolk Island pines and other indoor Christmas trees.

You need only bring a pen and notebook for recording the many tips that will be shared, and a large paper bag to protect the miniature plant you will take home at the end of class.

Instructor: Larry Latta is botanist-horticulturist for public information at the Gardens.

Fee: \$13 members/\$14.50 non-members (includes \$5 for materials)

Limit: 25

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 331-4000.

Registration Form for Classes, Field Trips and Lectures

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Member ID _____

(on top line of newsletter address label)

Address _____

City _____ ZIP code _____

Daytime Phone _____ Evening Phone _____

The Practical Gardener: A Guide to Breaking New Ground

By Roger B. Swain. Little, Brown and Company, Boston, Toronto and London. \$18.95. SB455.3S93 1989.

In his introduction the author identifies himself as the science editor of *Horticulture Magazine*. Even if he had not, most readers would recognize a scientific association, for who but a scientist would begin a book with a discussion of the sun's angles, a table of solar time and positions and detailed instructions for measuring the amount of shade in the garden with compass, protractor and plumb line? However, don't be put off by this beginning if you tend to be a by-guess-and-by-God gardener, because the theory is sound and the instructions are simple and accurate. For those faced with the reconstruction of an established garden this book offers a lot.

Roger Swain has collected many of his essays that previously appeared in *Horticulture Magazine*. They are found in this chatty book in the chapter, "20 Columbus Street."

He sugar-coats sound advice about soil types, acidity and water requirements with a droll humor. His description of the temptations of seed catalogs will keep this reviewer on the straight and narrow path next January. An occasional recipe, how to extract sap from a maple tree, pruning advice, spacing of plants, keeping insect and animal pests from the garden—all these and more are discussed here.

There are two subjects on which I disagree. The first is the feeding of lawns; the author says that established lawns need little or no feeding, but Denver gardeners do need to feed lawns for good results. The second is his contention that it is difficult to dispose of surplus garden produce. Local gardeners will find that Central Denver Community Services (295-1956) will be happy to have surplus produce that they pass on to area residents going through rough times and who need food.

Each chapter is complete in itself, so that when a cold frame is built, or annuals are planted, the tables provide vital, useful information on materials. The author includes his favorite reference books in parentheses within the text. The black-and-white illustrations are clear and, when shown from the gardener's perspective, looking down, they are especially helpful. Roger Swain shares his extensive knowledge in a happy and unassuming manner, producing a work that is at once instructive and entertaining.

Virginia Stratton
Member of DBG and Volunteer

Classic Garden Design: How to Adapt and Recreate Garden Features of the Past

By Rosemary Verey. Random House, New York, \$24.95. SB472.V45 1989.

With true scientific method, I allowed the book to fall open to a double page spread to make my point. On one page was a photo captioned "Hornbeam arches add interest under the balustraded terrace at the Chateau de Limpeville." On the facing page were words from Alexander Pope, 1713, "Any ladies that please may have their own effigies in Myrtle, or their husband's in hornbeam." Does this send you into the garden, eager to clip the privet into a likeness of your loved one, or does it make you toss the book out the window?

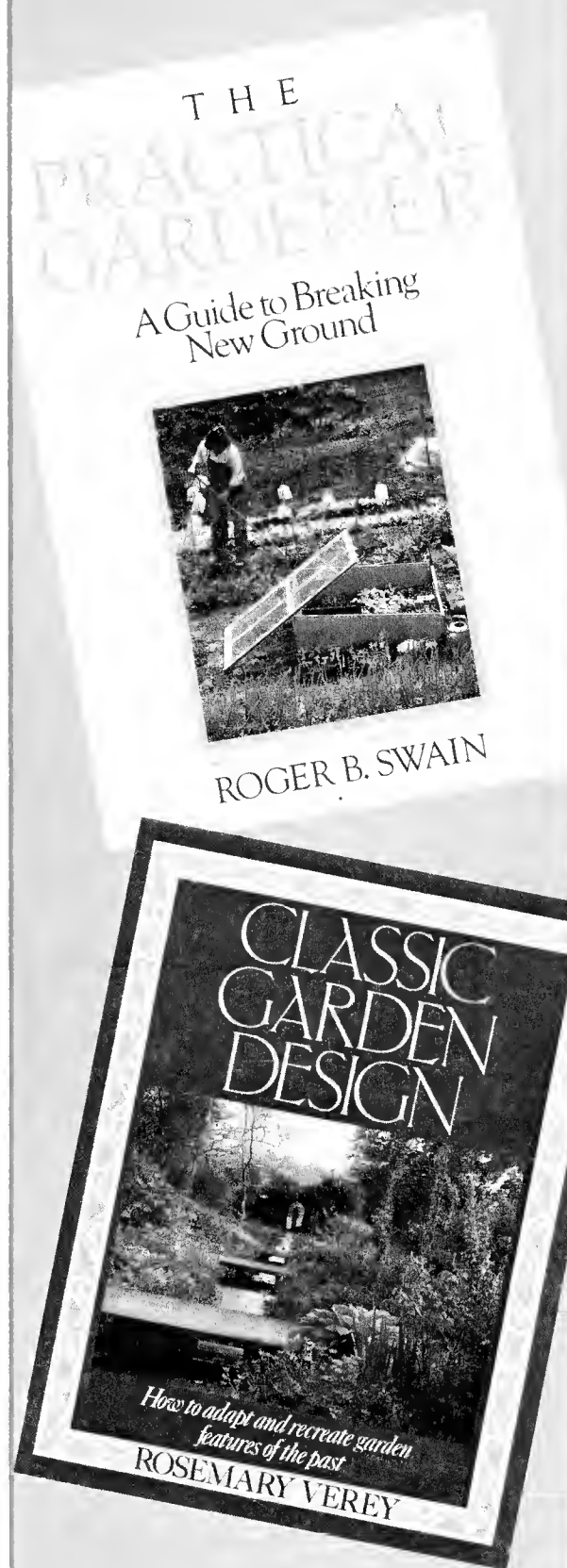
You probably won't be put off by hornbeam arches. If you pick up this book at all, you're predisposed to knot gardens, topiary and garden ornaments (and I don't mean gnomes). Even if you're not so inclined, the text is absolutely delightful, managing to be simultaneously flighty and fact-filled, personal and general. So contagious is Ms. Verey's enthusiasm that even I, the most ramshackle of gardeners, found inspiration on virtually every page. For example, I'm intrigued by the idea of a wattle fence made from willows as seen in the enclosed medieval gardens. I think it has real potential as a windbreak in my creek-side garden.

Like so many garden books today, this one tries to touch all bases. A ringer was brought in to write a chapter on natural gardening, clearly not Ms. Verey's forte. To integrate it with the rest of the book, the author filled the margins with quotes from Robinson's 1894 treatise on natural gardening. Lest we think even this source is too modern, we are given an example to strive for: The meadow in a well-known medieval unicorn tapestry.

Other chapters discuss walkways, hedges, vegetable gardens (we are not talking a victory-garden cabbage patch here), and water and rock gardening. The reading list goes back to the 16th century. To reinforce the mood, the color photographs are augmented by black-and-white prints, medieval manuscript illuminations, engravings, paintings, watercolors and instructive pencil sketches.

This is the most wonderful kind of garden book, classic in its idiosyncracies and passions and therefore terribly useful for fellow enthusiasts.

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Thanks from the Library

Thanks to all of the members of the Colorado Cactus and Succulent Society, the Rocky Mountain Bonsai Society and the Rocky Mountain Chapter of the American Rock Garden Society for their generous annual donations to the Helen Fowler Library. The donations will pay for all the periodicals received in each specialty area.

LIBRARY

Helen Fowler Library
Volume 12, No. 5
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The Natural Garden

By Ken Druse. Potter Publishers, New York, \$35.00. SB457.53.D7 1989.

This is a beautiful, useful, but frustrating book: If these are *natural* gardens, what are *formal* gardens? Many of the gardens are so organized, so weed-free and so glaringly colorful that natural is not the adjective that springs to mind. Ken Druse, garden editor of *House Beautiful*, took many of the photographs himself so sometimes illustrations and text usually correspond well. However, the text sometimes seems at variance with the photographs.

In what sense are these natural gardens? The reason for the discrepancy may be that these gardens resulted, in many cases, from substantial input of labor, time, professional design, space and/or money. If you don't have access to these, you may feel this is not the gardening style for you. In fact, it is quite suited to most of us—it is meant to be low-cost and low-maintenance style. Plants can be started from seed, integrated into existing vegetation and maintained without pesticides and herbicides. Oddly, British books on natural gardening are often more democratic, in a *noblesse oblige* sort of way, and provide guidelines for us with limited means.

It would be a shame if the specific gardens pictured here and the somewhat high-handed style of the author put people off. The book is quite useful, showing a mixed style of gardening, natural and formal, native and exotic. A section on the elements of design, including plant groups and garden types, follows the portfolio of gardens. Advice on planning and planting a natural garden is given, as well as plant lists, sources and bibliographies. Because it tries to cover the entire country (well, most of it—the Rockies are given short shrift), you'll need more specific regional information. Several sources exist and they are cited here and in the new handbook written by the national Center for Wildflower Research.

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(This book is available in the Gift Shop.)

Shrubs

By Roger Phillips and Martyn Rix. Random House, New York. \$19.95. SB435.P558 1989.

Roger Phillips and Martyn Rix's books are so beautiful and so lasting in value that I've given them as wedding gifts. This one includes over 1,900 shrubs in full-color photographs and promises to be an even better value for the money than the previous ones on British flora. It is the second in a series on garden plants, so we can hope for more to come.

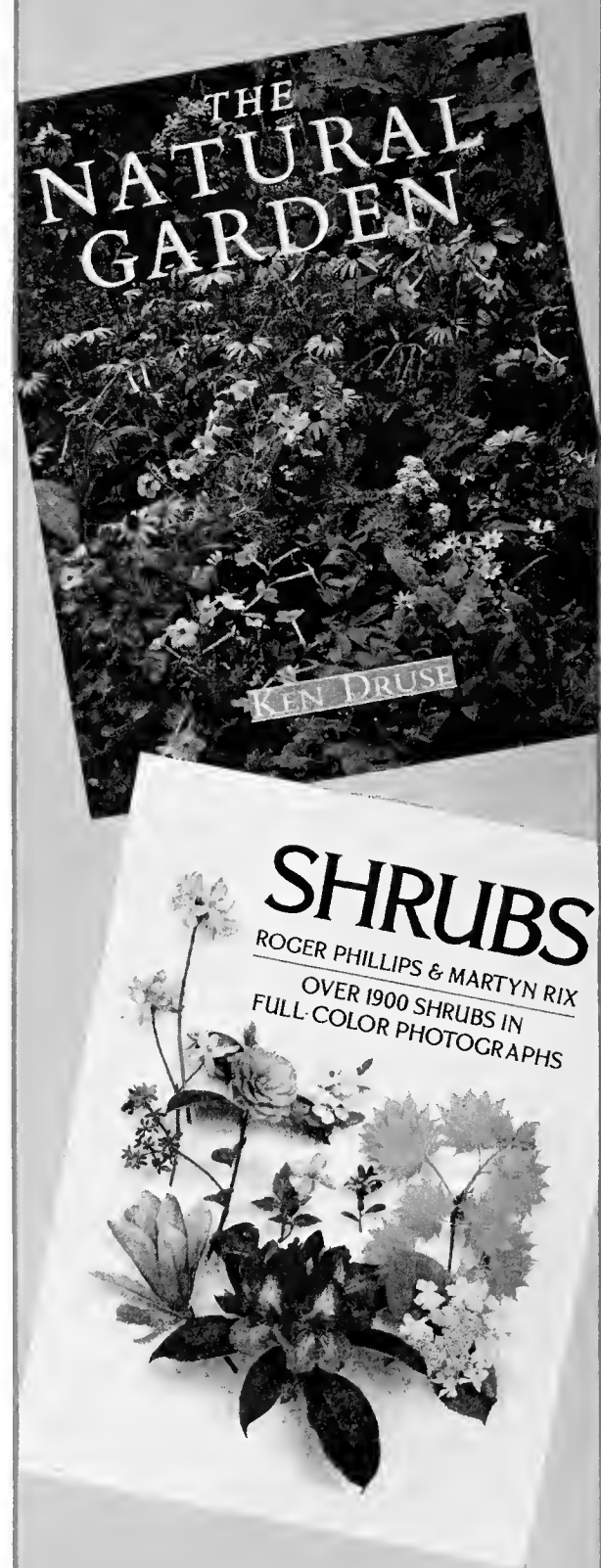
The photographs include field shots from remote and intensely romantic collecting localities. It is somehow moving to see, for instance, camellias in the courtyard of an old temple in their native Yunnan. Field shots are instructive as well as evocative. A picture in another Phillips and Rix volume made clear to me the value of bulbs for my garden: A rocky plain in Kurdistan, the sun beating down and snow-capped peaks rising in the background.

This is the organization of the book: The shrubs are arranged by flowering season and, within season, are grouped by genus. A studio shot of cuttings from several shrubs blooming on one day helps fortunate gardeners in the British Isles plan their gardens and makes the rest of us wistful. The group shot is accompanied by closeups of individual plants taken in gardens and in the field. The text gives scientific names, varieties, native habitat, hardiness and size data, but is weak on common names and families, a severe drawback.

The authors' comments on rhododendrons offer small comfort, "many rhododendrons grow on pure limestone, and it is still not clear why these do not tolerate more alkaline soils in cultivation."

But instead of gnashing your teeth over "rhodies," pore over all the types of lilac, peony, daphne, salix, clematis and viburnum that we could be growing if they were available. Then take the book to your local nursery and show the staff what they—and we—are missing!

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Recycle Your Books

During this season of giving, please donate your used books to the Helen Fowler Library for the annual Plant and Used Book Sale in May. Recycle your books, records, video tapes, and stamps. Additional information can be obtained by calling the librarian at 331-4000, Ext. 32.

Down the Garden Paths in December

Here, where the High Plains meet the Rocky Mountain foothills, the berries most likely to dress up our holiday greenery, inside or out, are the pearly blue fruits of the Rocky Mountain juniper, *Juniperus scopulorum*. The cheery, red-berried American holly, *Ilex opaca*, and the more traditional English holly, *Ilex aquifolium*, resent our high continental climate and consent to appear here only on greeting card illustrations or, during the two weeks before Christmas, in small, expensive plastic bags.

However, even though you won't find examples of either of these trees on your next stroll through the Gardens, you might be interested in looking up some of the other species of these interesting plants. (You'll notice that all are growing in shade or partial shade and in a location where the soil remains moist all year.)

Not all hollies are evergreen. Some have rather plain, un-scalloped leaves. One that is deciduous and decidedly characterless is *Ilex verticillata*. At the first hard October frost the leaves of this species crisped unattractively, turning brown and black. But some varieties are quite fruitful and their red berries offer welcome sparkles of color among the twigs of early winter. Look midway along the north facing slope of the Wingsong Garden (sometimes referred to as the bird berm) for the cultivar 'Winter Red.' Then, for comparison, while you're in that area of the Gardens locate the group of *Aronia arbutifolia* cv. brilliantissima, just to the west of the hollies, near where the pathway ascends the berm. These shrubs of the rose family, while similar in growth habit to *Ilex verticillata*, fruit more abundantly and are altogether superior landscaping plants. Throughout October and into November they clothed themselves in glossy, bright red leaves, their December berries merely continuing the pretty end-of-the-year display that began much earlier. Also, unlike the hollies, whose flowers are quite undistinguished, the aronias added pretty little blossoms to the scene in late spring.

To see the best hollies here at the Gardens, you need to visit the grounds surrounding Denver Botanic Gardens House, the mansion at the corner of Ninth and York Streets that houses the Gardens' administrative offices. There, in the northern shade of the garage, is a collection of "blue" hollies, so called because of their shiny, deep green foliage. Not as deeply scalloped as those of the Christmas holly, the leaves of these hybrids (*Ilex x meserveae*) nevertheless sport characteristic holly teeth along their margins. These are truly

beautiful shrubs all year whether viewed close up or from a distance, and are especially eye-catching with their seasonal clusters of brilliant fruits. They are easily as "Christmas-y" as the American or English hollies.

As with most members of this genus, the male and female flowers are borne on separate plants. Plants of both sexes must be grown in proximity to effect pollination and, therefore, the production of fruit. The female plants are, for all practical purposes, indistinguishable from cultivar to cultivar. 'Blue Princess' and 'China Girl' are equally pretty. As is 'Blue Maid,' which you'll find against the west wall of the Denver Botanic Gardens House



garden, midway to the front fence. The male counterpoints to these differ only in their lack of berries.

Against the south side of the garage, near the bench just inside the garden gate, are several examples of the inkberry, *Ilex glabra*. Their black fruit is unnoticeable. Although evergreen and quite cold hardy, the barely toothed leaves of these thin shrubs do little to recommend the plants as individual specimens. However, together these hollies offer a pleasant mass of green in a twiggy December landscape and quietly bring your winter stroll to a halt.

Gardening: December's Dilemma

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A troubling question that always faces us at the end of December is "What do we do with the Christmas tree?" Once the center of family fun and attention, how sad to merely trash it. And gardeners, with their innate sense of conservation, find it difficult to drag it out to the alley for the garbage truck to haul off to the landfill.

Several useful gardening alternatives are available to help you avoid this annual tannenbaum guilt trip. Consider these:

Cut the branches up into manageable sizes to mulch and protect perennials and low-growing evergreens against the drying winds, intense sunshine and fluctuating temperatures of winter. They'll also help capture snow and conserve soil moisture.

Create shelters for roses—large flowered hybrids (the teas) and climbers—to achieve the same purposes as above.

Stand the tree, whole, among deciduous shrubs or against another tree that has a large, bare trunk to provide a dense brushy shelter for small birds. Where **do** these little garden visitors go during winter storms? They usually congregate in thickets as near to the ground as they possibly can. If you decorate the tree with suet, apples or strings of popcorn you'll also be providing the birds with a well deserved post-holiday buffet.

If you have the manual stamina you may cut your evergreen into small pieces for the compost pile, but they may take more than one season to decompose. The branches of these pines, junipers and spruces—full of moisture and resins, as they are—are quite resistant to the composting process. However, if you have access to a chipper, your tree can be transformed quickly into either a very attractive and fragrant mulch or excellent material for the compost pile.

Citizens of a couple of cities in the metropolitan area are invited to participate in their municipalities' Christmas tree recycling programs. This opportunity is not, unfortunately, offered throughout the area. A November survey revealed that only the cities of Englewood and Thornton are prepared to handle their citizens' post-Christmas dilemma.

It behooves those of us who live in other areas to begin supporting the forces within our own cities' governments that are trying to work toward a solution to the annual waste of discarded Christmas trees. Perhaps the best garden tip for December is "Place a call to city hall!"

Larry Latta is the botanist-horticulturist for public information at DBG.

C D B G

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at Denver Botanic Gardens. Here is a listing of those groups and a **general** indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 331-4000.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months.

C	A	L	E	N	D	A	R
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	<i>*First meeting of a class with more than one session</i>					Quilt Show and Sale	Quilt Show and Sale, Victorian Christmas, Winter Protection for Roses
	3	4	5	6	7	8	9
	Spiral Weaving Workshop: Holiday Candles December 3-30 Wonder World of Trains		A Victorian Christmas: Flowers & Fruits, December & Those Winter Chores			Herald the Season	Teddy Bear Teas, Holiday Houseplants, Wonder World of Trains
	10	11	12	13	14	15	16
	High Teas, Wonder World of Trains			Gore Range Brass performs			Teddy Bear Teas, Wonder World of Trains
	17	18	19	20	21	22	23
	High Teas, Wonder World of Trains			Gore Range Brass performs			
	24	25	26	27	28	29	30
		Christmas—DBG is closed	Evening Hours	Evening Hours	Evening Hours	Evening Hours	Evening Hours
	31						

Coming Next Month

January 1 Happy New Year—DBG is closed	January 10 Watercolor Painting* January 13 Bouquet of Garden Books	January 13 February 4 "Flowers from the Royal Gardens of Kew"	January 16 Room with a Garden—The Living Collection*	January 18 Interior Environments,* Draw a Diary,* Pond of Dreams*	January 20 Botany for Beginners*	January 30 Botanical Illustration Workshop: A Day with William Curtis
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